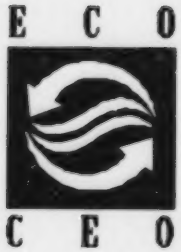
ONTARIO'S PERMIT TO TAKE WATER PROGRAM AND THE PROTECTION OF ONTARIO'S WATER RESOURCES

BRIEF TO THE WALKERTON INQUIRY
JANUARY 2001



ENVIRONMENTAL COMMISSIONER OF ONTARIO

TABLE OF CONTENTS

Executive Summary i

Why Water Matters 1

Why the ECO Examined Permits to Take Water 3

Water Resources Issues and Initiatives 7
- Evidence of Problems in Water Resources Management 7
- The Government's Response to Water Management Problems 9

What the ECO Reviewed 11

Statistical Findings of the ECO's PTTW Research 14
- Results of the Baseline Assessment of Permits to Take Water 14
- Results of the Follow-up Assessment of PTTW Decision Notices with Deficiencies 16

Qualitative Findings of the ECO's PTTW Research 18

Conclusions Drawn from the PTTW Assessments 25

Appendixes:

A: Guide for Applying for Approval of Permit to Take Water
B: Permit to Take Water Program / Guidelines and Procedures Manual
C: Applying for Permits to Take Water from Surface Water Sources in the Greater Toronto Area
D: Selected *EBR* Decision Notices and Permits to Take Water
E: Data Listing from the ECO's Baseline Assessment of the PTTW Program
F: Data Listing from the ECO's Follow-up Assessment of the PTTW Program
G: Data Listing from the ECO's Select Review of Special Conditions in PTTWs

Executive Summary

The Permit to Take Water program is the principal means by which the Ontario Ministry of the Environment (MOE) regulates the taking of water in the province. Under Section 34 of the *Ontario Water Resources Act*, a Permit to Take Water (PTTW) is required for most water takings of 50,000 litres per day or greater in Ontario. The permit requirement applies whether the source of the taking is groundwater or surface water. There are, however, a number of types of takings which are exempted from this permit requirement.

In the past two years, a number of issues have contributed to heightened concern about water takings in Ontario. They include:

- Public concern about the scale and number of water takings.
- Complaints from the public about the quality of information in permits and Environmental Registry proposal and decision notices.
- The promulgation in April 1999 of O. Reg. 285/99 (the Water Taking and Transfer Regulation), which requires that consideration be given to ecosystem function and the public interest when proposed water takings are being reviewed.
- A reported temporary moratorium on the issuance of new groundwater taking permits announced by the province in spring 1999.
- The Walkerton contaminated water incident in May 2000.

In early 1999, the Environmental Commissioner of Ontario (ECO) decided to review certain aspects of MOE's Permit to Take Water program in response to these concerns and in accordance with its mandate under Ontario's *Environmental Bill of Rights*. This report is based on the background research that was undertaken for the ECO's 1999/2000 annual report.

The ECO's review found a number of inconsistencies and deficiencies in PTTWs and Registry notices issued by MOE, as well as in the issuing process itself. Inconsistencies and deficiencies include:

- Some Registry notices included inadequate or inaccurate descriptions of PTTW proposals and permits, including ambiguously or incorrectly reported sources of water and inaccurately or inconsistently reported water quantities.
- MOE staff who administer the PTTW program use a mix of Metric units and Imperial measures in proposal and decision notices. This makes tracking, assessing and managing water resources more difficult.
- There is evidence of regional differences in PTTW evaluations by MOE staff, resulting in regional variations in PTTW administration.
- Takings were permitted which did not appear to take into account the quantity of water available in particular watersheds.
- There is no clear evidence that MOE consistently applies an ecosystem approach to

assessing PTTW applications and issuing permits.

These inconsistencies and deficiencies, along with broad exemptions for many water takings, suggest that the information generated by the PTTW program *could not* be relied upon to:

- Enable the public to make informed comments on PTTW applications.
- Enable MOE, conservation authorities, municipalities, members of the public and other stakeholders to develop regional or historical overviews of water taking trends.
- Allow stakeholders and water users to know how much water is actually being taken and or how much water is available to take in the future in any given area.
- Permit the verification that the PTTW program is operated in accordance with the O.Reg. 285/99 Water Taking and Transfer Regulation. For example, it is nearly impossible for the ECO to determine whether a key requirement, "protection of the natural functions of the ecosystem," is being achieved.

In addition to these findings, the ECO identified several outstanding issues that would benefit from discussion by the ministry, stakeholders and the public as MOE reviews its water taking policies and practices and updates key PTTW guidance documents. These issues include PTTW program thresholds, the relationship of the PTTW program to the Environmental Registry, and the capacity of MOE to provide ecological assessments of water takings.

The findings of the ECO's PTTW assessments raise three major areas of concern for the ECO. First, public accountability and transparency are threatened because of inaccuracies and omissions in the Registry notices for PTTWs, and because the actual PTTWs often omit or misrepresent crucial information. Second, ecosystem protection may be threatened because MOE staff are issuing permits for new water takings without access to fully complete or accurate information on existing water takings. Third, the problems with PTTW administration may be promoting conflict about PTTWs and are contributing to the growing number of leave to appeal applications related to PTTWs under the *EBR*.

Why Water Matters

Water resources are vital to Ontario's environment and ultimately sustain all of the plant, animal and human life in the province. Surface water bodies (e.g., lakes, streams and rivers) support many important ecosystem functions, such as providing reliable drinking water and habitat for fish, birds and wildlife. In many parts of the province groundwater sustains ecosystems by releasing a constant supply of water into wetlands and by regularly contributing up to 20 per cent of the flow of headwater streams. During dry periods, when surface water flows diminish, groundwater may supply most of the flow to some streams.

The major impacts from heavy extractions from water bodies include the loss of habitat for aquatic life and therefore the aquatic life itself, interference with other uses and functions of the water body, and potentially, stream, wetland or aquifer depletion (for specific consequences see Chart 1). These types of water quality impacts are bound to arise if Ontario's water resources are not managed carefully. Adopting a more holistic *ecosystem approach* to water resources management (see Chart 2) could help prevent many water problems from arising in the first place. An ecosystem approach to water resources management would require policy and program staff in the affected ministries to foster a new view of water resources. Such a view would, in the ECO's opinion, entail:

- An encompassing and interrelated view of water resources from precipitation through to run-off, percolation, groundwater recharge, evaporation and transpiration.
- The gathering of monitoring information to assess an ecosystem before decisions are made that could impact the ecosystem.
- The incorporation of best scientific knowledge into decision-making.
- An awareness of the long-term and cumulative effects of each individual decision.

Chart 1: Negative Consequences from Excessive Water Takings

Habitat Destruction. Excessive water takings can result in habitat loss for aquatic-based life, including plants, fish, amphibians and waterbirds. Habitat destruction is one of the key threats to wildlife populations.

Elevated Turbidity. Extraction of water from an aquifer or small surface water body can cause siltation and elevated turbidity, which can threaten the water's oxygen levels and plant and animal life and even impair treatment of the water for drinking purposes.

Reduced Diluent Capacity. Diminished water quantity can have water quality implications, particularly where contaminant sources exist in or near the water body. Under reduced flows or volume and a lower diluent capacity, some water bodies could develop conditions toxic to aquatic life because of inflows from septic systems, landfill leachates, spills, discharges, farming activities or underground storage tanks.

Drought Exacerbation. Naturally occurring water shortages can be exacerbated by water takings, particularly as some parts of the province are drought-prone.

Chart 2: Ecosystem Approach and Ecosystem Monitoring

What is an Ecosystem?

An ecosystem consists of air, land, water and living organisms, including humans, and the interactions among them. An ecosystem includes the community of living things, and the complex of physical and chemical factors forming the environment. For example, an aquatic ecosystem includes all water, whether flowing or standing; the processes, factors and natural cycles which affect it; and the organisms which live in the water.

What is an Ecosystem Approach?

An ecosystem approach to land use planning would provide early and systematic guidance on the interrelationships between existing and potential land uses and the health of ecosystems over time. This approach is based on the recognition that ecosystems have limits, especially in terms of the stresses they can absorb. There is growing evidence that too much stress can irreversibly degrade or destroy ecosystems.

What is Ecosystem Monitoring?

To effectively protect the environment, society needs to be able to discern early warning signs, and to be alerted to unexpected trends in environmental degradation. There is widespread agreement that society should anticipate and prevent environmental damage wherever possible. Damage cannot be anticipated and prevented if ecosystems are not monitored, including those elements without an apparent economic value. Ecosystem monitoring is an important tool – arguably the only tool – for discovering unexpected ecological trends and detecting early warning signs of environmental harm. For example:

- It was ecosystem monitoring that allowed scientists to first understand the impacts of acid rain in the 1970s.
- It was ecosystem monitoring in the 1990s that let researchers piece together the facts on high mercury concentrations in loons.
- The decline of certain frog populations world-wide is also a phenomenon that was first noticed and then tracked through ecosystem monitoring.

Sources: Standards Development Branch, Ministry of the Environment and the Environmental Commissioner of Ontario

Why the ECO Examined Permits to Take Water

In 1999, the ECO decided that an examination of MOE's administration of the PTTW program was warranted, based on issues that had arisen in provincial water resources management (see "Evidence of Problems in Water Resources Management" below). The examination was also based on the ECO's legislative obligations under Ontario's *Environmental Bill of Rights (EBR)*. One of the primary roles of the Environmental Commissioner of Ontario is to review how provincial ministries carry out the requirements of Ontario's *EBR*, including how they incorporate environmental and ecosystem functions into their decision-making. In this instance, the Ministry of the Environment is the focus as it makes decisions on Permit to Take Water applications.

In its Statement of Environmental Values under the *EBR*, MOE committed to adopting "an ecosystem approach to environmental protection and resource management."[1] This approach views ecosystems holistically and includes a consideration of "the cumulative effects on the environment" and the "interrelations among the environment, the economy and society." MOE committed to reflecting this ecosystem approach in its development of new legislation and policies and in its work of issuing permits under applicable MOE legislation.[2] The ECO, in its examination of MOE's Permit to Take Water Program, looked for evidence of this approach in the ministry's decision-making.

Since many of the PTTWs issued by MOE are posted on the Environmental Registry, the ECO reviews many of these instruments as part of the ECO's regular procedures. Under Section 35 of the Ontario's *Environmental Bill of Rights*, a minister who gives notice of a proposal shall ensure that relevant comments are considered when decisions about the proposal are made. Two primary functions of the ECO are to monitor the quality of information in Registry postings and determine how effectively ministries incorporate relevant comments into decisions. The results of this assessment are reported to the Ontario Legislature through the ECO's annual reports.

The Permit to Take Water Program in Brief

A Permit to Take Water (PTTW) is required for many major water takings[3] in Ontario. Water taking in excess of 50,000 litres per day requires a permit under Section 34 of the *Ontario Water Resources Act (OWRA)*. The permit is required whether the source is ground water (e.g., a well) or surface water (e.g., a river, lake or storage pond). There is no requirement to regulate, report or document takings of less than 50,000 litres per day under the PTTW program. Moreover, some takings which exceed this threshold are exempted from the normal PTTW application process, such as those for emergencies, domestic or livestock watering. The Ministry of the Environment has produced a number of documents to guide applicants and staff reviewing applications, as detailed in Chart 3.

Summary of the PTTW Application Process

Chart 3: Permits to Take Water – Guidance Documentation

Application Guide: The *Guide for Applying for Approval of Permit to Take Water* (see Appendix A) provides guidance to proponents planning a water taking that would require approval under Section 34 of the *OWRA*. In particular, this document clarifies the information required by the application form and process. The Guide was last updated in 1994 and includes a description of the *EBR* requirements for the application process, but does not include a reference to the Water Taking and Transfer Regulation passed in 1999.

Guidelines and Procedure Manual: To assist ministry staff with the process of reviewing applications and issuing permits to take water, MOE has prepared the *Permit to Take Water Program /Guidelines and Procedure Manual* (See Appendix B). This manual was last revised in April 1999. It includes an appendix dealing with the Water Taking and Transfer Regulation, but the manual itself has not been substantially updated since 1984 (e.g., any statement of policy or law since that time is not reflected in the text of the manual).

GTA Companion Guide: This 1999 document, *Applying for Permits to Take Water from Surface Water Sources in the Greater Toronto Area*, was prepared by MOE's Central Region to accompany the *Guide for Applying for Approval of Permit to Take Water* (see Appendix C). Specifically, it was created to address concerns related to significant water demands arising from new housing developments and associated recreational facilities (e.g., golf courses) in the Greater Toronto Area. The document reflects an "updated approach" to reviewing applications for PTTWs from surface water, which includes the need to give "due consideration to the ecology and hydrology of the watercourse" and consider "available information on other water users." It also suggests the type of information which water taking proponents should submit to meet key objectives: ensuring minimum stream flow, preventing unacceptable interference, providing fair allocation and ensuring water conservation.

Applicants are advised to apply before any water works construction proceeds (e.g., a well construction). Applications must include accurate information on location and the proposed quantity of the taking, and if applicable and known, any information about water storage, use of ponds, pumping tests or existing problems. Applicants are advised to submit their applications to the MOE Regional Office appropriate to the location of the water taking. The Regional Office reviews the application, which includes a review of the applicability of the *EBR* (see Chart 4). At the end of the review process the Director either issues a permit (with terms and conditions) or denies the application. Proponents who are refused PTTWs can appeal to the Environmental Review Tribunal (ERT) and request that the denial be overturned. For this reason, MOE staff are often reluctant to deny permits to proponents, and instead usually impose conditions that address concerns about a particular PTTW. Proponents can also appeal to the ERT and request that conditions in a permit be modified.

Historically, PTTWs have been issued on a first-come, first-serve basis. When a conflict arose, MOE could use PTTWs to allocate available water among competing users (a brief description of the riparian rights doctrine and the evolution of water taking regulation is included in Chart 5). As of April 1999, the Water Taking and Transfers Regulation set out criteria for MOE staff to consider before issuing a PTTW. This regulation requires that consideration be given to issues such as ecosystem function and the public interest.

Chart 4: Permits to Take Water and the *Environmental Bill of Rights*

PTTW proposals that are subject to the *EBR* are posted on the Environmental Registry for public comment for 30 days (for more discussion about the Registry and public comment process, see also Charts 5 and 6). At some time after this 30-day period, MOE posts a decision notice on the Registry. The decision notice indicates whether or not the permit was issued and why. Increasingly, MOE has been including an electronic link to a copy of the full permit to provide more information than the decision notice would provide. The following types of PTTW applications *are not* posted on the Registry:

(1) most municipal water takings;
(2) takings for irrigation of crops; and
(3) takings of less than one year in length.

In terms of sheer quantity of water, municipal PTTWs are by far the largest segment. However, municipal PTTWs are not posted on the Registry for comment because of an exemption in the *EBR* for approvals issued under the *Environmental Assessment Act.* Since municipal PTTWs are covered by the Municipal Class Environmental Assessment (EA) approval process, they escape the *EBR* public review process. The Class EA approval process was intended to spare proponents from seeking individual approvals for undertakings of a repetitive nature whose environmental effects are predictable in scope and nature.

One important consequence of this situation is that the Registry has become a very limited database of PTTWs. As few, if any, municipal takings appear on the Registry, the Registry provides a misleading picture of water consumption patterns. Therefore, conservation authorities, PTTW applicants and the general public cannot rely on Registry information to provide an accurate overview of water taking trends in a particular region or over a specified period of time. Moreover, residents are unable to challenge MOE decisions on these permits by launching leave to appeal applications under Part II of the *EBR* (see Chart 6). In contrast, many minor changes to PTTWs sought by private companies must be posted on the Registry.

MOE's approach to the Class EA exception may result in significant environmental consequences. There is considerable public interest in and comment on PTTWs posted on the Registry. Public comment on specific PTTWs is very valuable in ensuring that a broad range of environmental implications is considered before the PTTW is granted.

Chart 5: The Doctrine of Riparian Rights – How Water has been Managed Historically

The doctrine of riparian rights (*riparian* is drawn from Latin and means river bank) originated under English common law. The doctrine was developed by the courts to resolve disputes about water between land owners living in humid regions. It relates solely to surface water bodies, *not* to groundwater.

Under the doctrine, a riparian land owner had a right incidental to his ownership of the land to take water from the stream flowing through his property for ordinary purposes. His obligation was not to affect the corresponding rights of other riparian owners living downstream.

Under the original, strict interpretation of riparian law, every riparian owner was entitled to the full flow of the stream through his property, undiminished in quality and quantity except by "natural" uses including the domestic consumption of the riparian owner, watering stock and minor gardening. Originally, the doctrine excluded "artificial" uses such as large scale irrigation or industrial use.

In 1792, the riparian common laws of England were introduced into what is now Ontario. In the 1800s, the courts began to allow large water takings for industrial uses in order to encourage economic development. By the mid-19th century, industrial uses of water were causing an increase in riparian disputes, but no satisfactory judicial resolution was achieved. Over time, the judiciary's role in water management became more uncertain.

Section 34 of the *OWRA* (the section which regulates water takings) attempted to clarify uncertainties about the riparian doctrine, particularly with respect to modern water use and management issues.

A lingering debate among the legal community and regulators is whether public agencies have the authority to deny a PTTW if the water user is not affecting the corresponding rights of another user.
Some lawyers contend that the riparian rights doctrine prohibits such a denial. From this perspective, water takings that are large or controversial or the subject of public concern may still be permitted to occur. Others argue that the riparian rights doctrine has been modified extensively by regulatory programs (based on statutes such as the *OWRA* and *EPA*) like the Permit to Take Water and Municipal-Industrial Strategy for Abatement programs, and that the combined regime does allow the province to regulate water takings.

Sources: Ontario Ministries of Environment and Agriculture and Food, Environmental Commissioner of Ontario

Water Resources Issues and Initiatives

Over the past several years a number of problems related to water resources management has garnered public and media attention, and spurred the provincial government to undertake various legal and policy initiatives. These issues and initiatives have important implications for MOE's Permit to Take Water program.

Evidence of Problems in Water Resources Management

Water Shortage and Competition

Concerns about water shortages have increased in Ontario in recent years. As reported in the ECO annual report for 1999/2000, businesses and rural residents in some parts of Ontario who once had unrestricted access to abundant supplies of groundwater have found themselves sharing existing resources with a growing number of new users, including commercial interests, new housing developments and more intensive farm operations. In some cases serious disputes have erupted. Exacerbating these conflicts, southern Ontario experienced lower than average levels of precipitation and higher than average temperatures in the latter 1990s. In early 2000, some farmers in one southwestern Ontario community expressed concern that water taking limits that MOE was proposing would impede their ability to irrigate crops during the peak summer growing season. MOE later relaxed the limits during those months. In return, farmers and local farm groups committed to developing a water management strategy for the watershed.

Several surface water bodies have also been the subject of issues of competition and feared shortages. In the summer of 2000, Spencer Creek, a small creek in southwestern Ontario with a baseflow supported by groundwater, "disappeared" temporarily because of excessive takings from the local watershed. MOE intervened to restrict groundwater takings and the creek "reappeared." In late 2000, concern over the magnitude of a water taking permit from the Tay River (near Ottawa) caused residents to request leave to appeal the permit. Existing users of the Tay River are alleging that the taking is large enough to impair streamflow and that the decision was based on inadequate information, which meant the consequences of the taking could not be adequately known. In late 2000, the Environmental Review Tribunal (formerly the Environmental Appeal Board) agreed that there were information gaps in the PTTW permit application, that the appellants had grounds for an appeal, and ultimately granted leave to appeal the permit.[4]

In the past five years, the issues of water takings, shortages, competition and management approaches have also been the subject of numerous studies,[5] theses[6] and articles.[7] Concerns about MOE's approach to groundwater management in Ontario have been expressed by the Provincial Auditor,[8] the International Joint Commission,[9] and recently, by experts testifying at the Walkerton Inquiry.[10]

Moratorium Announced on Water Takings

As reported in the ECO's July 2000 Special Report, the province announced a moratorium on water takings in the spring of 1999. In part, this moratorium was announced to ease growing concerns about water takings and the potential for shortage and conflicts. In response to ECO inquiries, MOE indicated that a 'moratorium' was never imposed, but that the ministry was applying increased scrutiny to PTTW applications. However, as late as September 28, 2000, some government officials continued to report that a moratorium on the issuance of new PTTWs was in place.

Lack of Analysis of Overall Trends in Water Taking

The Ministry of the Environment has acknowledged weaknesses in its knowledge of trends in water taking in the province.[11] The province's water taking permits do not lend themselves to ready comparison or tabulation, due in part to the inconsistent use of various units used to specify water quantities and flows. As a result the PTTW program does not enable a straightforward and efficient means of analyzing overall trends in water taking. A further hindrance includes the frequent lack of streamflow data. Some steps that would assist with trend analysis in the future were announced by MOE and MNR in early 2000. These included an aquifer mapping and groundwater monitoring network and a low-water response plan to restrict and manage water takings at the local level during extreme conditions.[12]

Conservation Authorities Try to Fill the Monitoring Void

Conservation Authorities (CAs) are among the few agencies in Ontario that carry out environmental protection activities in the context of a drainage basin perspective. CAs established under the *Conservation Authorities Act* are required to consider the impact of water takings (both ground and surface water) on the hydrology of a drainage basin. As an example, in the mid-1990s, the Credit Valley Conservation Authority (CVCA), which monitors the Credit River drainage basin (extending from Orangeville south through Mississauga to Lake Ontario), undertook its own analysis because of concern over the volume of water taking permits issued in this watershed. In 1999, the CVCA submitted a brief to its Board of Directors and other groups about its concerns. The brief pointed out that if all the permitted water takings in the Credit Valley basin were added together, "there would not be adequate supplies of water to meet the demand."[13]

The Great Lakes Charter and Renewed Interest in Water Takings

The Great Lakes Charter is an agreement of the Council of Great Lakes Governors (CGLG), signed in 1985 by the eight Great Lakes Governors and the premiers of Ontario and Quebec.[14] The Charter specified consultation process requirements for diversions of water from the Great Lakes. In late 2000, the Council began drafting a proposal called Annex 2001, which would create a new binding agreement to manage Great Lakes waters, particularly with regard to diversions and consumptive uses. The impetus for the Annex 2001 proposal was MOE's decision in 1998 to grant a controversial permit to take water to

the Nova Group to withdraw for export 10 million litres per day from Lake Superior. Annex 2001 proposes triggers for review of U.S. takings and places new conditions on large takings.[15] Ontario's PTTW program could be affected by the province's pledge to work with the CLGC to "develop a new set of agreements and create a new standard."[16]

The Government's Response to Water Management Problems

In the past two years, the province has announced a number of water management policy initiatives, in part to address some of the problems that have been discussed above. These initiatives included:

Water Taking and Transfer Regulation

On April 30, 1999, MOE's Water Taking and Transfer Regulation (O. Reg 285/99) came into effect. Billed by MOE as Canada's first "conservation-based water taking" regulation,[17] the regulation established criteria for MOE staff to consider before issuing a PTTW. The regulation also requires that MOE staff must now give precedence to the impact that the PTTW will have on natural functions of the ecosystem.[18] They also have the discretion to consider the impact on uses for livestock, municipal sewage and water supply, agriculture and domestic wells. Furthermore, staff have authority to assess whether it is in the public interest to grant the permit.

Operation Clean Water

Operation Clean Water was launched on August 8, 2000 by the Minister of the Environment and the Premier in the wake of the Walkerton contaminated water tragedy to augment continuing efforts to improve water quality and protect public safety.[19] While this initiative is really a repackaging of previously announced programs, some new projects and initiatives were announced. The initiatives under Operation Clean Water include: the Drinking Water Protection Regulation (O. Reg. 459/00); a management review of MOE operations; and consultations on groundwater management, on nutrient management, and on the regulation of small waterworks facilities.

Ontario Water Response – 2000

In July 2000, the Ministry of Natural Resources (MNR) posted a proposal notice on the Registry indicating that it was seeking public input on a policy proposal called Ontario Water Response – 2000. The purpose of Ontario Water Response – 2000 was "to establish a response plan to deal with low water conditions in Ontario."[20] As of January 2001, the ministry had not posted a decision with regard to this proposal. Further, one senior MOE official stated at a public meeting in November 2000 that the proposal is not likely to be treated as a high priority in the immediate future.[21] Though no decision has been announced about this proposal, the monitoring of precipitation, lake levels, flows, and regional hydrology is occurring on an ongoing basis, and MNR is posting the information on its intranet site (i.e., internal site, not its publicly accessible internet site).[22] This work is coordinated by MNR for the Low Water Task Force sub-

committee, which includes representation from the Ministries of the Environment, Agriculture, Food and Rural Affairs, and Natural Resources.

Groundwater Monitoring Network

In October 2000, the Ministry of the Environment officially launched the Provincial Groundwater Monitoring Network in partnership with conservation authorities and municipalities in Ontario.[23] The intent of the network is to provide information for decision-making on water takings, drought management, protection of groundwater quality, land use planning, and related health and safety issues.[24] In the first year of operation the network partners intend to launch key projects in seven watersheds.[25] At present, the ECO is unaware of MOE's plans with respect to how it intends to use this new information in decision-making on PTTWs. The ECO intends to monitor this project and will continue to report to the Legislature on how MOE is using the information in its decision- making.

Groundwater Study Financing

In fall 2000, the province announced the Ontario Small Town and Rural (OSTAR) Development Initiative (a program of the Ontario SuperBuild Corporation).[26] Under the OSTAR initiative, the province is making funds available to municipalities to assess infrastructure needs, including the assessment of groundwater systems.[27] One of the explicitly stated purposes of eligible studies under the OSTAR initiative is to enable municipalities to develop a means to manage "groundwater supplies for current and future users."[28] Previous to the OSTAR initiative, the Provincial Water Protection Fund had sponsored 34 groundwater studies.[29]

Revisions to Guidelines and Procedures Manual

MOE staff can consult the document *Permit to Take Water Program /Guidelines and Procedure Manual* "in the maintenance of the permit program and in the investigation of water shortage complaints" (see Appendix B). The manual has not been substantively updated since 1984, but MOE undertook some minor administrative revisions in 1999 to update statutory references and include the Water Taking and Transfer Regulation as an appendix. Operational changes to the permit system, such as the requirement to give regard to the natural functions of an ecosystem, brought about by the Water Taking and Transfer Regulation, have not been incorporated into the text of this manual. MOE is reported to be undertaking a more substantial revision of the manual.[30]

What the ECO Reviewed

The ECO's approach to reviewing PTTWs involved two distinct review projects, a *Baseline Assessment* and a *Follow-up Assessment*. The Baseline Assessment involved a broad review of PTTW decision notices[31] and their associated permits to determine the quality of information in both. This assessment also attempted to determine the impacts and implications that deficiencies would have on public comment rights and ecosystem management. For a description of the *EBR* comment process, terms used, and how a member of the public would comment on a proposal, see Chart 6. The Follow-up Assessment was more specific in that it reviewed decision notices and permits *only* for the purposes of determining whether problems identified in the Baseline Assessment were continuing or not. For an example of a PTTW decision notice see Chart 7.

The following is a more complete description of each assessment:

> **Baseline Assessment**. 183 Registry decision notices that were posted between May 1, 1999 and March 31, 2000 were reviewed. A copy of the actual permit issued to instrument holders for each notice was obtained from the Ministry of the Environment. The permits were reviewed for: accuracy of information in Registry notices; quality and quantity of information in Registry notices; trends in the permitted length of the water taking; and the provision of functioning electronic links to a final version of the PTTW or other related information. As well, the ECO conducted a limited assessment of special conditions contained in the permits corresponding to the decision notices posted in the month of June 1999.
>
> **Follow-up Assessment**. The ECO continued its review in 2000 to determine whether problems identified in the Baseline Assessment were continuing. The Follow-up Assessment involved 255 Registry notices for permits to take water that were posted from April 1, 2000 to November 20, 2000. The ECO determined that 42 of 255 (16%) had at least one significant deficiency[32] and staff proceeded to examine these more closely. Of the 42, nine had a working electronic link to a copy of the permit; the ECO compared the information in these nine decisions notices to their associated permits.

The statistical findings from these assessments appear below. The full listings of permits reviewed appear in Appendix E and F. In carrying out the two assessments, the ECO also tracked the implications that any quality of information shortfalls might have for the more substantive matters of ecosystem monitoring and environmental protection. These findings are included in the final sections of this paper.

Chart 6: How to Comment on Proposals under the *EBR* Process

The *EBR* provides everyone in Ontario with certain rights and responsibilities, notably, legal rights and formal procedures for participating in environmental decision-making by prescribed ministries. Key terms used in the *EBR* Comment Process include:

Prescribed Ministries. Thirteen government ministries in Ontario are required to inform the public about the environmental Acts and policies that they are drafting. Six ministries are also required to post notices about the regulations they are developing and permit applications they have received.

Statement of Environmental Values. Each of the ministries subject to the *EBR* has a Statement of Environmental Values (SEV). The SEV guides the minister and ministry staff when they make decisions that might affect the environment.

The Environmental Registry. The Registry is one of the primary means for prescribed ministries to inform the public of environmentally significant policies, Acts, regulations and permits and to seek comment from the public. The Registry itself is a publicly accessible, searchable electronic database.

Proposal Notices. When a minister seeks comment on policy, Act or regulation or permit, it is posted on the Registry as a *proposal notice.*

Decision Notices. When a decision has been made on a proposal, it is followed up with a *decision notice.* An example of a decision notice is presented in Chart 7.

Leave to Appeal. In certain instances, the public has the right to seek leave to appeal decisions made by ministries, including decisions to issue certain PTTWs. Leave to appeal must be sought within 15 days of a decision being posted on the Registry.

Comment Process:

1) A ministry's proposal is posted on the Environmental Registry for comment as a *proposal notice.*

2) The notice is posted for a minimum of 30 days. During this time the public is invited to comment on the proposal.

3) After the proposal has been posted the responsible ministry reviews all written comments and considers all relevant comments. *See Note below.*

4) The ministry makes a decision that should be consistent with its Statement of Environmental Values. Ministries are supposed to post a *decision notice* as soon as possible. The decision notice is to include the number of comments received and how the ministry considered the comments.

5) If members of the public have concerns about the decision on a permit, licence or certificate of approval, they may request leave to appeal the decision.

Note: One of the provisions of the EBR relevant to PTTWs and potential conflicts would be the public's right to request enhanced public participation (e.g., a meeting to resolve conflicts).

Chart 7: The first page of an actual Environmental Registry notice. This Chart reproduces the first page of a decision notice on the Environmental Registry for a PTTW issued in October 2000. The complete notice and its associated permit is included in Appendix D.

EBR Registry Number: IA00E0851 **Ministry Reference Number:** 23011031

Type of Posting: Instrument **Status of Posting:** Decision

Ministry: Environment

Date Proposal Loaded: 2000/05/18

Date Decision Loaded: 2000/10/30

Comment Period: 30 **day(s)**

Written submissions were permitted between May 18, 2000 and June 17, 2000.

NOTICE OF **DECISION** FOR AN INSTRUMENT:

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Instrument Type:

OWRA s. 34 - Permit to take water

Proponent:

Hamilton Golf and Country Club 232 Golflinks Rd., Ancaster, Ontario, L9G 2N5

Location of Activity:

Town of Ancaster

County/District/Region: Regional Municipality of Hamilton-Wentworth

Other Activity Location Identifiers:

Lot 46, Concession 3, Town of Ancaster, Regional Municipality of Hamilton-Wentworth

Description:

Permit: Renewal
Source: One on-stream pond on Ancaster Creek
Purpose: Golf Course Irrigation
Period of Taking: Indefinite
Amount of water to be taken(maximum): 1,000 us gallons per minute, 480,000 us gallons per day, 365 days per year
Location: Lot 46, Concession 3, Town of Ancaster, Regional Municipality of Hamilton-Wentworth

Decision:

Approval granted. Permit valid until March 31, 2005 Inclusive

Results of the Baseline Assessment of Permits to Take Water
May 1, 1999 to March 31, 2000 Sample size =183

Length of Permit

- 84 of 183 or 46% of the decision notices did not indicate the length of the permit or noted the permit length in an unclear manner.

- In 90 of 183 or 49%, the length of the permit according to the actual permit was different from that stated in the Registry decision notice.

- According to the actual permits:
  - 9 of 183 or 5% were for 1 year;
  - 40 of 183 or 22% were for 5 years;
  - 110 of 183 or 60% were for 10 years;
  - 1 of 183 or 0.5% was for 20 years;
  - 13 of 183 or 7% were less than 10 years (e.g., 2,3,7 years)
  - 1 of 183 or 0.5% permit stating its length as "in perpetuity;"
  - 10 of 183 or 5% did not stipulate a length.

Quantity of Taking

- In 104 of 183 or 57%, there were differences between the notices and the permits with respect to the maximum daily water quantity that could be extracted by the permit holder.[33]

Source of Taking

- In 29 of 183 instances or 16%, the stated source of water in the notice was different from that in the permit.

Links to Information

Approximately midway through the review (November 25, 1999), MOE began to provide an electronic link in its PTTW decision notices to portable document files (PDF) containing an actual version of the permit issued to proponents. Of the 183 permits reviewed, 60 were issued after November 25 and therefore should have had an electronic link:

- 16 of these 60 or 27% had a malfunctioning electronic link.
- 1 of 60 or 2% was missing the link altogether.

Chart 8: Select Review – Special Conditions in Permits to Take Water

In light of growing public concerns about water availability (see previous section "Water Resources Issues and Initiatives"), the ECO was interested in whether MOE included special conditions in its PTTWs to control water takings (such as stipulating average and/or seasonal amounts for water taking). The ECO was also interested in whether or not permits contain "site-specific" conditions regarding the measuring and reporting of water quantities. The inclusion of measuring/reporting conditions would ensure that MOE could access information on the actual quantities of water being taken (actual quantities may vary from the maximum permitted amount). Such information would assist MOE in making decisions on whether or not to issue new permits in the vicinity of existing water takings or to renew existing permits.

The ECO reviewed the PTTWs associated with Registry decision notices for the month of June 1999 (14 PTTW decision notices in all). June 1999 was the first full month after the alleged moratorium was placed on the issuance of PTTWs (as noted above, the announced moratorium never was implemented by MOE staff). The ECO noted that some of the permits contained specific conditions that limited the water taking. The ECO tracked the frequency of these conditions in the permits:

- 1 of the 14 permits specified an average and/or seasonal water taking amount.
- 5 of the 14 permits specifically required measuring and reporting of water taking quantities.
- 5 of the 14 permits stated that the Director has the power to alter the water taking (the condition specified that the MOE Director may suspend or reduce the water taking during times of drought or water shortage in the "locality" of the taking).

From this limited assessment (14 PTTWs from June 1999), it appears MOE did not require specific measuring and reporting conditions as a matter of course and that MOE's practice in applying such conditions was variable. Since this was a small sample of permits corresponding to Registry notices posted after the alleged moratorium was announced, a more detailed review would be required to make any definitive statements about MOE's practice of applying measuring and reporting conditions in PTTWs.

The data listing for this review is found in Appendix G.

Results of the Follow-up Assessment of PTTW Decision Notices with Deficiencies
April 1, 2000 to November 30, 2000 Sample size =42

Availability of Information

- 0 of the 42 decision notices or 0% included the contact name of a ministry staff person. However, all notices included a generic title and address of an MOE staff person to whom comments could be directed.

- 7 of the 42 decision notices or 17% did not indicate the issuing authority (i.e., which MOE office). The remainder were issued by the following MOE regional offices: Hamilton (6), London (12), Kingston (5), Thunder Bay (7), Toronto (5). In terms of the quality of information in the Registry notices, no regional office distinguished itself as being particularly good or bad.

- 7 of the 42 decision notices or 17% did not contain enough information to determine the source of the water taking (ground or surface).

- All of the 42 decision notices or 100% contained information on the amount of water to be taken. 26 or 62% were expressed in litres (per minute, per day or per second) and 16 or 38% were expressed in gallons (per minute or per day). Note: 1 Registry notice used both litres and gallons.

- 3 of the 42 decision notices or 7% did not contain sufficient information to identify the purpose of the water taking. 5 of the 42 decision notices or 12% provided brief information on the purpose of the water taking but this information failed to describe the use of the water (descriptions such as commercial or industrial were used).

- 5 of the 42 decision notices or 12% did not have leave to appeal provisions because the permits were issued for periods shorter than one year. To assist the public and promote transparency in decision-making, MOE could explain in such cases that *EBR* leave to appeal provisions do not apply to permits shorter than a year.

Length of Permit

- 9 of the 42 decision notices or 21% did not contain information on the period of the water taking (such as 365 days a year or from May to September).

- 19 of 42 decision notices or 45% did not contain the date when the permit was issued.

- 24 of the 42 decision notices or 57% did not contain a permit expiry date.

- 9 of the 42 decision notices or 21% did not contain enough information to allow the ECO to determine the length of the permit. 16 permits or 38% were issued for 10 years. 12 permits or 29% were issued for 5 years. 1 permit was issued for less than one year. 2 permits or 5% were issued for 3 years. 1 permit was issued for 9 years (permit was previously issued the year before for 10 years). 1 permit was issued "permanently."

Links to Information

- 33 of the 42 decision notices or 79% had a malfunctioning electronic link to the permit when the decision notice was initially posted on the Registry, 8 or 19% had a working link and the remaining permit was not issued.

- 16 of the 33 decision notices (or 48%) without a working link on the day that the decision notice was posted, still did not have a working link as of Nov. 24, 2000 (the rest had been fixed by MOE by this date).

Permit Accuracy and Information

To determine the accuracy of actual versions of the permits vis-a-vis the notices which are supposed to summarize them, the ECO reviewed the 8 permits which had a working link to Registry notices:

- All 8 permits contained an expiry date.
- 5 of the permits stated when the permit was issued and 3 did not.
- 3 of the permits specified the period of taking and 5 did not.
- All 8 permits stated the amount of water to be taken – all used litres as the unit of measurement and 4 used both litres and gallons.
- 5 of the permits clearly stated the purpose of the water taking and 3 of them, while not clearly stated, were easy to figure out because they were for golf courses.
- 7 of the permits had special conditions.
- There were 3 different templates used – they appeared to be consistent by region. Three permits issued by the Hamilton office used one template while three permits issued by the Central Region office in Toronto used a second template. The other two permits used a third template.
- 3 of the permits were inconsistent with the Registry posting in terms of the details of a water taking (i.e., in 1 Registry notice there were 4 water sources but the permit only mentioned 3).

QUALITATIVE FINDINGS OF THE ECO'S PTTW RESEARCH

Qualitative findings of the PTTW assessments are summarized below. The findings begin with those related to public comment provisions, followed by those related to the potential impact on ecosystem health when decisions are made with inadequate water taking information.

Content of Registry Notices

Descriptions of proposals for PTTWs that are provided by MOE in Registry proposal notices are inadequate and potentially misleading. MOE should insist that proponents provide MOE with better descriptions of proposed water takings. MOE should refuse to proceed with applications in which the applicants have provided a description of the proposed water taking so insufficient that the description can not be used as is or revised in order to provide the public with useful information. MOE should return such applications and request that the applicant improve the quality of its information before the applicant resubmits it.

ECO found a significant number of inconsistencies and deficiencies in the descriptions of PTTWs posted on the Registry by MOE. For example, the public is routinely not given enough information in the Registry notices to allow informed comment, including the name of the person to whom they should direct their comments. Furthermore, inaccuracies appear at an unacceptable frequency in the information provided by Registry notices (additional examples are included under *Grossly Inaccurate Reporting of Quantities* in Chart 9).

While the focus of this research was decision notices, the situation with respect to proposal notices also raise concerns for the ECO. Frequently, decisions notices contain virtually the same text as the proposal, only noting that the decision has been made. In this regard, the ECO believes that many of the decision notices reviewed would not have provided enough information to encourage informed comment when they were at the proposal notice stage. The effectiveness of the notice and comment provisions of the *EBR* depends on the quality of information available in proposal notices.

While the provision of an electronic link to a copy of the permit itself is very helpful, it should not be used as a reason to avoid describing the decision clearly and concisely in the decision notice. Posting information in a consistent manner will help ensure that the Registry is useful and can be relied upon. When used, electronic links to a copy of the permit must work in order for the public to have access to the designated information. This is especially important if members of the public choose to exercise their leave to appeal right. The ECO is concerned that links still do not work. The *EBR* allows members of the public to file a leave to appeal application only up to 15 days after a decision is placed on the Registry. This very short time period makes it very important that all information is posted accurately in all forms.

Chart 9: Problem Areas – PTTWs and the Environmental Registry

Poor Information in Notice Results in Launch of Appeal. In one instance, a decision notice indicated only that the permit was issued and when and to whom, but failed to note that the permit quantity and length of the approved PTTW was shorter than the length requested by the proponent. In this case, MOE approved a 1-year PTTW, not the 10-year PTTW sought by the proponent. Moreover, the PTTW was approved for a single well, not the two wells originally sought. When members of the public noticed that the permits had been issued, a leave to appeal application was made. In denying the leave application, the Board noted that "the Environmental Registry posting on the instrument was misleading" and that the "Applicants may have believed that the Director had issued a permit for 10 years." The electronic, publicly accessible copy of the permit had the correct information but the applicants did not consult the information.[34] Even if they had consulted the PTTW, confusion could persist because the permit contradicts the decision notice. If the vital specifications of the taking had been included in the decision notice, this misinterpretation could have been avoided and the leave to appeal application might not have been launched. [IA9E1353]

Grossly Inaccurate Reporting of Quantities. MOE published in a permit contradictory information about the amount of water which could be extracted. A water taking that totalled 302,000 litres per day (when all sources in the permit were added together) listed a maximum daily taking of 234,000,000 litres per day in the permit. The decision notice states that the amount permitted was reduced from the amount originally proposed. A copy of this permit is included in Appendix D.[IA9E0785]

Discrepancies Between Commencement of Water Taking and Permit Issue Date. For an October 1999 decision notice [IA9E1035], MOE issued the permit in October 1999 but the permit itself states that water taking will begin on April 1999. This was a permit renewal, but raises question of why the water taking was able to continue for months without a permit, Registry decision, or opportunity for leave to appeal. In another instance, the permit and cover letter are dated November 1998 but state that the water taking could commence effective September 1998. The decision notice [IA8E1322] was not posted until August 1999.

Inaccurate Notices. In another case a significantly inaccurate statement was included by MOE in a decision notice. The Registry decision notice indicated that the MOE had decided not to issue a permit but also included (in the decision notice) a permit expiry date. Furthermore, MOE supplied the ECO with a copy of the permit, which proved that a permit had been issued and that the decision notice was inaccurate. [IA9E0063]

[ ] = Environmental Registry Number

Chart 9: Problem Areas – PTTWs and the Environmental Registry (*Continued*)

Discrepancy in Permitted Water Quantity. A decision notice posted on the Registry in January 2000, stated that the quantity of the water taking approved is 319,680 litres per day. However, the associated PTTW only allows a water taking quantity of 86,400 litres per day. The decision notice does not provide reliable information on the actual water taking quantity or the reason for the change. [IA9E1315]

Discrepancy in Permitted Water Quantity and Water Sources. A decision notice posted on the Registry in November 1999, stated that approval had been granted for the following water taking:

1 well: 360,000 Imperial Gallons per day
1 dam: 260,000 Imperial Gallons per day
1 pond: 620,000 Imperial Gallons per day

The permit provided by MOE allows water taking from the well at the rate for the well stated above. Thus, the decision notice does not provide reliable information about sources or water quantity. [IA9E0915]

Time Lag Between Permit Date and Decision Notice. Several examples of decision notices being posted on the Environmental Registry months after the permit was issued include: permit dated August 1997 and Registry decision notice dated July 1999 [IA7E0431]; permit dated April 1999 and Registry decision notice dated December 1999 [IA9E0004]; permit dated September 1999 and Registry decision notice dated January 2000 [IA9E1319].

Reliance on a Qualitative Condition Instead of a Specific Quantity. Three decision notices state that the approved quantity of water taking for the flood control structure is "dependent on nature." The specific permits fail to provide any reference to quantity. However, the attached cover letters written by MOE note that, due to recent water shortages, a special condition is included to ensure equitable access to the water supply and the protection of natural resources. The condition states: "The permit holder shall operate the flood control structure in such a manner that streamflow is not stopped and is not reduced to a rate that will cause interference with downstream uses of water or with the natural functions of the stream." There is nothing in the notice or permit that would inform a member of the public about the quantity, or even a possible range of magnitude, of the water taking. For example of this type of posting, see Appendix D. [IA9E0744] [IA9E0745] [IA9E0746]

Timing of Decision and Posting Notice

MOE is required to post notice of a proposal for a prescribed instrument (in this case, certain Permit to Take Water proposals) for comment before it is implemented. MOE also must post a notice of the decision to implement the proposal and provide an explanation of the effect of public comments on the ministry's decision-making. In the case of some PTTW proposals, MOE has left the proposal notice on the Registry for months or even years without posting a decision notice. This is troublesome for a number of reasons. Neither the public nor the Environmental Commissioner is able to tell whether MOE is still actively considering the proposal, has decided to drop the proposal, or has implemented the proposal but neglected to post a decision notice. If a decision is posted months or years after the proposal was posted, then those who commented on the proposal may miss the decision altogether. Public expectations are raised by postings. Failure to post decision notices promptly may discourage the public from making the effort to provide input. Further, a decision made months or years after the proposal was posted can make recalling important facts and details difficult. This is especially relevant to members of the public who may wish to challenge a decision.

Issue Dates

As shown in more detail in Appendix E, the ECO found several problems with the issue dates of permits. First, many decision notices reviewed as part of the baseline assessment were posted more than a month after the permit was issued by MOE. In fact, in several cases many months transpired between the permit issuance date and the posting of a Registry decision notice (see Appendix E). This is a serious issue since the proponent could be taking water for some months prior to initiation of the leave to appeal period (the 15 days begins once the decision notice is posted on the Registry). Second, there are numerous examples of permits not being dated, although in some (but not all) cases MOE noted the permit issue date in the Registry notice. Third, there were several examples where water taking pre-dated the issuance of a permit or Registry notice.

Water Quantities

The ECO observed that water quantities were not described in a consistent way in Registry notices and actual permits. In decision notices, water quantities were listed in some permits as a flow (e.g., litres per hour) and in others as a total quantity (e.g., 10 million litres) to be taken. These different approaches to describing quantities undermine efforts to analyze, compare and tabulate information. Decision notices sometimes state that the taking being sought was approved as proposed, even though the actual permit provided for a different quantity of water taking. Both Metric and Imperial quantities were in use but sometimes both were not listed.

In order to comment effectively on a Registry proposal or seek leave to appeal a decision, the public requires clear, unambiguous information about rates and quantities. For example, one uniform system of measurement, Metric, should become the standard, although Imperial measures could be provided for additional reference.

In order for PTTW quantity information to be useful for planning purposes, detailed quantity information should be available. For example, rates such as litres per minute or per day should be converted into the total quantities being sought daily, monthly and yearly, and the permit should specify the time dimensions of the water taking operation (i.e., whether the taking is based on an 8-hour day, 24-hour day, 5 or 7 days per week, continuous or seasonal or any other variation). If a total quantity is provided (e.g., 200 million litres), it should be converted to the daily or monthly rate of taking. Some Permits to Take Water require that this information be recorded as a special condition of the permit.[35]

If permit quantities and measurements are not standardized, then MOE, the public and stakeholders will have great difficulty tracking water takings and ensuring the protection of ecosystems.

Length of Permit

During the fall of 1999, the Minister of the Environment stated that "we have also updated our procedures to include strictly-defined time limits or expiry dates on permits."[36] The ECO's review of permits during the baseline assessment period (May 1999 through March 2000) found that the ministry's practice of including in the permit a time limit for the water taking did indeed improve after the fall of 1999.

The most recent *Permit to Take Water/Program Guidelines and Procedure Manual* does not provide guidance on permit lengths. The March 1999 *Applying for Permits to Take Water from Surface Water Sources in the Greater Toronto Area/Companion to the Guide for Applying for Approval of Permit to Take Water* only notes that "an expiry date is specified on most permits. The duration of Permits will vary depending, in part, on the level of concern associated with the water taking." In November 2000, a senior MOE official indicated that MOE's new approach to time limits was to grant permits with a length of: two years for water bottling operations; five years for golf course operations; and ten years for most other takings.[37]

The ECO is concerned, from the perspective both of public policy and ecosystem protection, that the ministry has not come forward with a proposal to amend current MOE policies on permit lengths. Moreover, MOE's approach to publicizing its new approach to time limits appears to exclude many stakeholder groups, including the general public.

Location of Taking

In order for the location of a water taking to be genuinely useful for planning, forecasting and ecosystem management purposes, planners and analysts need precise location descriptions which can be employed in databases and computer mapping technologies. For example, if UTM (universal transmercator) coordinates were provided, which are available from a standard, publicly available 1:50,000 topographic map, then the water taking information could be incorporated into a GIS (geographic information system) database. From the GIS database, plots of the hydrology of an area could be generated. For example, plots of the hydrology of the entire Grand River Drainage Basin have been generated by the Grand River

Conservation Authority (GRCA) for use in water resources planning and management. This type of application by the GRCA indicates how water taking information could be incorporated in an ecosystem approach to water resources management.

Ecosystem Considerations

A key component of managing the ecosystem aspects of water takings was supposed to be the Water Taking and Transfer Regulation (WTTR). As reported, the WTTR is intended to be a "conservation-based water taking" regulation,[38] and to provide criteria for MOE staff to consider before issuing a PTTW. Staff are now to give precedence to the impact that the PTTW would have on natural functions of the ecosystem.[39] Staff also have the discretion to consider the impact on uses for livestock, municipal sewage and water supply, agriculture and domestic wells and to assess whether it is in the public interest to grant the permit. Based on the ECO's PTTW assessments, it seems doubtful that this approach has been adopted fully and consistently in the PTTW program. Some of the inconsistency may be attributed to the incomplete revision of key PTTW guidance documents.

The applicant guide for PTTW (*Guide for Applying for Approval of Permit to Take Water*) has not been updated to reflect the operational changes brought about by the WTTR. The ministry's staff document (*Permit to Take Water Program /Guidelines and Procedure Manual*), last revised in 1999, refers to the WTTR only in an appendix. It is likely that when MOE staff, PTTW applicants, and the public interpret the new regulation they are doing so on a case-by-case basis. As noted in a December 1999 Environmental Appeal Board Decision, there is a danger that on a case-by-case basis, the WTTR will not be interpreted in a consistent or appropriate manner.[40] Without this important regulatory direction incorporated into guidance documents, key ecosystem considerations such as the impact on the baseflow of rivers, habitat, exacerbation of droughts, turbidity and water body oxygen levels may not be incorporated into decision-making.

Outstanding Issues to Consider

The ECO's review of the PTTW program raises some fundamental issues that would benefit from discussion by the ministry, stakeholders and the public as MOE reviews its water taking policies and practices and updates its guidance documents.

In order to capture enough information to make the PTTW program a genuinely useful tool for planning, consideration could be given to whether a number of boundaries and thresholds are still appropriate. For example:

- The current threshold of 50,000 litres per day excludes many water takings and therefore vital information from the program.
- Many agricultural takings are not captured by the PTTW program. Water takings which are not subject to permit requirements could still be made subject to reporting requirements in order that a fuller picture of water consumption by humans is known.

- Domestic water wells constitute a vast number of small water takings. Though these water takings were not the subject of this analysis, they would need to be factored in to any hydrological analysis which attempts to be complete and reliable.

Without a more comprehensive approach to acquiring and managing information about water takings in the province, it is doubtful that an accurate and reliable data source on water takings will exist in Ontario.

In order to ensure that the public has access to a comprehensive database of Permits to Take Water, consideration could be given to expanding the number and types of PTTWs proposals which are posted on the Environmental Registry. Specifically, consideration could be given to whether it remains appropriate to exempt the vast majority of municipal water taking permits under the Municipal Class EA process.

Finally, a lingering concern for the ECO is the means by which MOE will carry out PTTW application reviews to ensure the protection of ecosystem functions. Qualified staff are not available in each regional office of MOE to undertake ecological assessments. Further, the ECO is unaware of any recent MOE guidance documents related to ecological assessment that could be examined and applied by MOE staff.

Conclusions Drawn from the PTTW Assessments

The Permit to Take Water assessments undertaken by ECO staff in 1999 and 2000 raise three major areas of concern for the ECO. First, public accountability and transparency are threatened because of inaccuracies and omissions in the Registry notices for PTTWs, and because the actual PTTWs often omit or misrepresent crucial information. Second, ecosystem protection may be threatened because MOE staff are issuing permits for new water takings without access to fully complete or accurate information on existing water takings. Third, the problems with PTTW administration may be promoting conflict about PTTWs and are contributing to the growing number of leave to appeal applications related to PTTWs under the *EBR*.

MOE's administration of Ontario's Permit to Take Water program is inadequate and needs improvement. Specifically, improvements could be made to the accuracy and availability of information in Permits to Take Water and their associated *EBR* Registry notices. As a starting point, information related to the quantity of water and the length and duration of takings could be improved and standardized. Such changes are required to enable the program to yield information that could be relied on to track, plan for and protect Ontario's water resources.

In the absence of such improvements there are serious questions about the usefulness of the information from the PTTW program. Without a database of reliable water taking information, there is significant risk that many water taking permits will be granted and land use planning decisions made without adequate knowledge of the availability of water resources. Furthermore, decisions about water resources will not be made in a transparent and publicly accountable manner, contrary to the goals of the *EBR*.

Beyond process issues, MOE's poor administration of the PTTW system poses real implications for ecosystem protection. It is unclear how relevant information about existing water takings is being factored into decisions about issuing permits for new water takings. MOE has admitted that it does not know how much water is available in the province for taking purposes. These information gaps may have already resulted in the permitting of an excessive level of water taking for some ecosystems and watersheds. The overuse of a water resource can and has resulted in habitat loss, impairment of other uses and conflict between competing users.

One of the key guiding principles of MOE's Statement of Environmental Values is that the "ministry will adopt an ecosystem approach to environmental protection and resource management."[41] This approach views the ecosystem holistically and includes a consideration of "the cumulative effects on the environment" and the "interrelations among the environment, the economy and society." MOE committed to reflecting this principle in applicable Acts and regulations but also in the permits issued under these Acts.[42] The ECO, in its review of MOE's Permit to Take Water program, found
that this principle was not being applied consistently across the program.

While the Water Taking and Transfer Regulation is a welcome development and could help ensure the application of the ecosystem approach more consistently throughout the PTTW program, the ECO remains concerned that key guidance documents have not been updated to fully reflect the direction and intent of this regulation. Without such a standardized approach, variances in program delivery and weaknesses in the quality of information that the PTTW program generates will continue to surface.

End Notes

1. The Ministry of the Environment's Statement of Environment Values indicates that one of its guiding principles will be the Ecosystem Approach: "The Ministry will adopt an ecosystem approach to environmental protection and resource management. This approach views the ecosystem as composed of air, land, water, and living organisms, including humans, and the interactions among them. When making decisions, the Ministry will consider: the cumulative effects on the environment; the interdependence of air, land, water and living organisms; and the interrelations among the environment, the economy and society." URL: http://www.ene.gov.on.ca/envision/env_reg/er/sevs/index.htm.

2. The Ministry of the Environment's Statement of Environment Values indicates in Part IV - Application that: "Instruments such as certificates of approval, permits, licences and orders are issued under the authority of Acts and made pursuant to specific Ministry policies and regulations. As the guiding principles in Part III are incorporated into the development of Acts, regulations and policies, decisions on instruments will in turn reflect these principles." http://www.ene.gov.on.ca/envision/env_reg/er/sevs/index.htm

3. Water taking in excess of 50,000 litres per day require a permit in Ontario under Section 34 of the *Ontario Water Resources Act*. The permit is required whether the source is ground water (e.g a well) or surface water (e.g. a river, lake or storage pond). Source: "Review process for permits to take water, " *In Brief* circular series, Ministry of the Environment, January 2000.

4. Bigelow, Donna, *Summary of Dillon et al. V. Director, Ministry of the Environment*, Internal ECO Summary, November 2000. Landon, Laura, "Tay River Decision to be Appealed, " *Ottawa Citizen*, November 9, 2000.

5. Kreutzwiser, R., and de Loe, R, *Agricultural and Rural Water Use in Ontario/A Report to the Agricultural Adaptation Council under the National Soil and Water Conservation Program*, August 31, 1999, pp. 1, 5, 28, 34.

6. For a review of the PTTW program and water supply allocation issues, see *An Evaluation of Ontario Rural Water Supply Allocation Policy and Practice*, Master Thesis, University of Guelph, Harold John Leadlay, June 1996. For the role of dispute resolution in water taking conflicts, see *Dispute Resolution to Help Prevent or Resolve Groundwater Conflict in Rural Southwestern Ontario*, Master Thesis, York University, Katharine Harris, March 1998.

7. Avery, Roberta "Request for water permit riles drought stricken Flesherton," *Toronto Star*, August 27, 1999 and Burt, Bob "Water shortages prompt province to take action," *Guelph Mercury*, May 7, 1999.

8. Office of the Provincial Auditor, *Accounting/Accountability/Value for Money/1996 Annual Report*, pp. 121-124.

9. International Joint Commission, *Protection of the Water of the Great Lakes/Final Report to the Governments of Canada and the United States*, February 22, 2000, pp. 26-27, 43-44.

10. In testimony at the Inquiry into the Walkerton Water Tragedy, Dr. Ken Howard of the University of Toronto, an expert in hydrogeology, indicated that: "Most parts of the world which use groundwater extensively manage the water; in Ontario unfortunately we don't manage water, the degree of management extends simply to issuing permits to take water and to me issuing permits to take water is a little bit like me writing cheques on my bank account when I don't know how much money is coming in every month and how much is going out to pay, you know, other bills." See transcripts: *Walkerton Inquiry to Inquire into the Walkerton Water Tragedy for October 16, 2000, Volume I*, p.104.

11. Reported by Hardy Wong, Director, Water Policy Branch, MOE, on November 7, 2000 at the Canadian Bar Association (Ontario Section) Breakfast Seminar on Water and Groundwater.

12. Environmental Commissioner of Ontario, *Changing Perspectives/Annual Report 1999/2000,* (Toronto: ECO, 2000), p. 40.

13. Barron,Vicki, General Manager of the Credit Valley Conservation, *Water Report* (Report to the Chairman and Members of the Board of Directors, Credit Valley Conservation), June 11, 1999.

14. Council of Great Lakes Governors, *Overview/Annex 2001 and Future Agreements,* December 2000. URL: http://www.cglc.org/projects/water.

15. Under Annex 2001 (draft), a trigger for reviewing certain proposed diversions of 1 million gallons per day is being proposed. Only a small number of proposed diversions in the United States are expected to escape review. To escape review, diversions would need to be subject tot he Water Resources Development Act and presumed to be of *de minimis* impact. While Ontario would not be bound by the provision regarding *de minimis* impact, as a signatory the province has committed to "Create a new standard requiring an improvement to the water and water-dependent natural resources of the Great Lakes before allowing new water uses." See *Overview/Annex 2001 and Future Agreements,* December 2000, pg. 5, Council of Great Lakes Governors. URL: http://www.cglc.org/projects/water.

16. Under Annex 2001(draft), Ontario would, among other things, work to "create a new standard requiring an improvement to the water and water-dependent natural resources of the Great Lakes before allowing new water uses." This would mean that "proponents of a new water use mitigate the adverse effects by improving the Great Lakes water resources in some way." See *Overview/Annex 2001 and Future Agreements,* December 2000, pp. 1,4, Council of Great Lakes Governors. URL: http://www.cglc.org/projects/water.

17. Ministry of the Environment, *Protecting Ontario's Groundwater*, Media Backgrounder to News Release of October 30, 2000. http://www.ene.gov.on.ca.

18. Environmental Commissioner of Ontario, *Changing Perspectives / Annual Report 1999/2000,* (Toronto: ECO, 2000), page 38.

19. Ministry of the Environment, *Operation Clean Water*, Media Backgrounder to the News Release of August 8, 2000.URL: http://www.ene.gov.on.ca.

20. Ministry of Natural Resources, *Ontario Water Response -2000,* EBR Posting PB00E6011, July 24, 2000.

21. Reported by Hardy Wong, Director, Water Policy Branch, MOE, on November 7, 2000 at the Canadian Bar Association (Ontario Section) Breakfast Seminar on Water and Groundwater.

22. Ministry of Natural Resources Intranet Site, *Low Water Levels Conditions Reports,* URL: http://mnrweb.mnr.gov.on.ca/nmrd/lnh/water/lowwater/.

23. Ministry of the Environment, *Protecting Ontario's Groundwater*, Media Backgrounder to News Release of October 30, 2000. URL: http://www.ene.gov.on.ca.

24. Ibid.

25. See "MOE Comment" in *Changing Perspective/Annual Report 1999/2000,* (Toronto: ECO, 2000), pp. 38.

26. Ministry of the Environment, *Ontario launches groundwater monitoring network,* News Release of October 30, 2000. URL: http://www.ene.gov.on.ca

27. Ibid.

28. Ministry of the Environment, *Protecting Ontario's Groundwater,* Media Backgrounder for News Release of October 30, 2000. URL: http://www.ene.gov.on.ca.

29. Ibid.

30. Personal Communications, Darla Cameron (Office of the Environmental Commissioner of Ontario) and Phyllis Miller (Ministry of the Environment), December 22, 1999.

31. The ECO's research involved a review of PTTW Registry decision notices, *not proposal notices*, for a number of reasons. Since the ECO wished to review the nature of the actual permits issued by MOE it could only do so by reviewing decision notices. If proposal notices were reviewed, the only available information would be what was being sought by the applicant, not what was permitted. A decision notices typically contains virtually the same information as the proposal notice, only adding that a decision has been made (in this regard the approach is conservative e.g. an assessment of the proposal notices would yield a greater level of information deficiency). Finally, in many cases, the *EBR's* leave to appeal provision is enabled when a decision is made and therefore accurate information is critical.

32. *Absence of Contact Name:* None of the 42 notices had a contact name (i.e., the person who could be approached for further information about the proposed taking). They did however include a staff title and address. *Permit Link Deficiency:* 34 decision notices did not have a functioning electronic link to a version of the permits on the day that the decision notice was posted. Many decision notices do not provide sufficient information to describe the taking and therefore the link to an actual version of the permit is important. *Absence of Leave to Appeal Statement.* 5 decision notices did not include Leave to Appeal provisions which was appropriate as the length of the permit was less than a year. In such cases, however, a statement indicating that the leave to appeal provisions do not apply and why should be included in the decision notice. *Comment Summary Deficiency:* 3 decision notices received comments from the public, however, the summary of the comments was so limited it would be difficult for a member of the public to determine the nature of the comments and in some cases how they had an impact on the decision.

33. In some cases, the difference appeared to be caused by a faulty calculation (i.e. conversion of a daily extraction rates (litres per day) into a total quantity (total litres or cubic metres). In other cases, no daily quantity was specified, only a quantity per minute which makes conversion to daily, monthly or yearly quantity subject to the number of minutes assumed that the taking will operate (e.g., continuous, 8 hours per day etc.).

34. In this case, the applicants had been unable to access the actual PTTW because it was available only as an Adobe Acrobat portable document file (PDF). The leave applicants did not have this free computer program or did not know how to use the program.

35. For example, see EBR Posting IA00E0851, Schedule "A" Special Terms and Conditions of Permit to Take Water No. 00-P-2632 for the Hamilton Golf and Country Club. It includes the conditions that the "pumping rate, total number of hours of pumping and the total volume of water taken shall be recorded on a daily basis during irrigation" and a "report detailing the rates and amounts of water withdrawn relative to streamflow and pond outflow shall be submitted."

36. The Honourable Tony Clement, Notes for Remarks to Conservation Ontario Annual Symposium, Nottawasaga Inn, Alliston, October 18, 1999.

37. Reported by Hardy Wong, Director, Water Policy Branch, MOE, on November 7, 2000 at the Canadian Bar Association (Ontario Section) Breakfast Seminar on Water and Groundwater.

38. Ministry of the Environment, *Protecting Ontario's Groundwater*, Media Backgrounder to News Release of October 30, 2000. URL: http://www.ene.gov.on.ca.

39. Environmental Commissioner of Ontario, *Changing Perspectives / Annual Report 1999/2000*, (Toronto: ECO, 2000), page 38.

40. Environmental Commissioner of Ontario, *Changing Perspectives / Annual Report 1999/2000*, (Toronto: ECO, 2000) page 38.

41. The Ministry of the Environment's Statement of Environment Values indicates that one of its guiding principles will be the Ecosystem Approach: "The Ministry will adopt an ecosystem approach to environmental protection and resource management. This approach views the ecosystem as composed of air, land, water, and living organisms, including humans, and the interactions among them. When making decisions, the Ministry will consider: the cumulative effects on the environment; the interdependence of air, land, water and living organisms; and the interrelations among the environment, the economy and society." URL: http://www.ene.gov.on.ca/envision/env_reg/er/sevs/index.htm.

42. The Ministry of the Environment's Statement of Environment Values indicates in Part IV - Application that: "Instruments such as certificates of approval, permits, licences and orders are issued under the authority of Acts and made pursuant to specific Ministry policies and regulations. As the guiding principles in Part III are incorporated into the development of Acts, regulations and policies, decisions on instruments will in turn reflect these principles." URL: http://www.ene.gov.on.ca/envision/env_reg/er/sevs/index.htm.

APPENDICES

A Note Regarding Appendixes A-C

For a copy of any of the documents contained in Appendixes A-C:

- Guide for Applying for Approval of Permit to Take Water
- Permit to Take Water Program / Guidelines and Procedures Manual
- Applying for Permits to Take Water from Surface Water Sources in the Greater Toronto Area

please contact the Ministry of the Environment Public Information Centre at:1-800-565-4923 or (416) 325-4000.

Appendix D: Selected EBR Decision Notices and Permits to Take Water

Note: the electronic version of this appendix does not contain an actual copy of the permit to take water associated with each of the decision notices. A copy of any of the permits referred to can be obtained electronically or from the Ministry of the Environment (at the address listed in each notice).

EBR Registry Number: IA00E0851

Ministry Reference Number: 23011031

Type of Posting: Instrument

Status of Posting: Decision

Ministry: Environment

Date Proposal Loaded: 2000/05/18

Date Decision Loaded: 2000/10/30

Comment Period: 30 **day(s)**

Written submissions were permitted between May 18, 2000 and June 17, 2000.

NOTICE OF **DECISION** FOR AN INSTRUMENT:

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Instrument Type:

OWRA s. 34 - Permit to take water

Proponent:

Hamilton Golf and Country Club 232 Golflinks Rd., Ancaster, Ontario, L9G 2N5

Location of Activity:

Town of Ancaster

County/District/Region: Regional Municipality of Hamilton-Wentworth

Other Activity Location Identifiers:

Lot 46, Concession 3, Town of Ancaster, Regional Municipality of Hamilton-Wentworth

Description:

Permit: Renewal
Source: One on-stream pond on Ancaster Creek
Purpose: Golf Course Irrigation
Period of Taking: Indefinite
Amount of water to be taken(maximum): 1,000 us gallons per minute, 480,000 us gallons per day, 365 days per year
Location: Lot 46, Concession 3, Town of Ancaster, Regional Municipality of Hamilton-Wentworth

Decision:

Approval granted.

Permit valid until March 31, 2005 Inclusive

Number of Comments Received: 1

Effect of the Comments on the Decision of the Ministry:

Comments received were reviewed and where appropriate were considered in the ministry's decision whether or not to proceed with this proposal. In this case, comments were consistent with concerns within the ministry and as a result terms and conditions were added.

These conditions do not represent all conditions imposed on the instrument holder but rather those that are directly in line with comments received.

The comment was from the Hamilton Region Conservation Authority. Concerns with impact to this cold water habitat were expressed. Therefore a special condition was added to minimize the the impact as suggested by the Conseration Authority.

Alternatively, you may access an electronic copy of the decision and/or supporting documentation by clicking here:

http://www.ene.gov.on.ca/envision/env_reg/er/documents/pttw/2000/1A00E0851.pdf

May a resident of Ontario seek leave to appeal this decision (s. 38 EBR)?: Y

The EBR stipulates that the Ministry must make every reasonable step to ensure that all comments relevant to this proposal received as part of the public participation process are considered in this decision (S. 35 EBR). Only comments relevant to the proposal were considered in this decision.

Any resident of Ontario may seek leave to appeal this decision, by serving written Notice, within 15 days of the Decision Date noted above. The Notice must be served upon the following:

Environmental Commissioner:

Environmental Commissioner, 1075 Bay Street, Suite 605, 6th Fl.
Toronto, Ontario M5S 2B1
FAX: (416) 325-3370

Issuing Authority:

Director
West Central Regional Office
Box 2112, 9th Floor, 119 King St. West
Hamilton, Ontario, L8N 3Z9
PHONE: (905) 521-7715 FAX: (905) 521-7820

Proponent:

Hamilton Golf and Country Club
232 Golflinks Rd.
Ancaster, Ontario, L9G 2N5

Appellate Body:

Environmental Appeal Board
Contact: The Secretary
2300 Yonge St., 12th Floor, P.O. Box 2382, Toronto, Ontario, M4P 1E4
PHONE: (416) 314-3300 FAX: (416) 314-3299

The Notice must be signed and dated and include all of the following information:

- **The EBR registry Number, the Ministry Reference Number, the Proponent's name and address to whom the instrument was issued and the location of Activity. (All available from this Registry posting)**
- **A copy of any comments that were submitted on the original proposal, if comments were not submitted, an explanation of your interest in seeking leave to appeal the decision is required.**
- **A description of the grounds for the application for leave to appeal including information that demonstrates that:**
  (a) there is a good reason to believe that no reasonable person, having regard to the relevant law and any government policies developed to guide decisions of that kind, could have made the decision; and
  (b) the decision in respect of which an appeal is sought could result in significant harm to the environment.
- **The portion of the instrument or each term or condition in the instrument in respect of which the leave to appeal is applied for.**
- **The grounds on which you intend to reply at the hearing, in the event that the leave to appeal is granted, in relation to each portion that you are seeking leave to appeal.**

EBR Registry Number: IA9E0785

Ministry Reference Number: ER-6973

Type of Posting: Instrument

Status of Posting: Decision

Ministry: Environment

Date Proposal Loaded: 1999/06/30

Date Decision Loaded: 1999/08/24

Comment Period: 35 **day(s)**

Written submissions were permitted between June 30, 1999 and August 04, 1999.

NOTICE OF **DECISION** FOR AN INSTRUMENT:

Instrument Type:

OWRA s. 34 - Permit to take water

Proponent:

King's Bay Dev. Corp. c/o Quorum Dev. 16 Esna Park Drive, Suite 107, Markham, Ontario, L3R 5X1

Location of Activity:

Township of Mariposa

County/District/Region: County of Victoria

Other Activity Location Identifiers:

Part of Lot 2, Concession B, Part of Lots 1 & 2, Concession C and Part of Lot 29, Registrar's Compiled Plan No. 550 and Part of the Road Allowance between Concessions B & C (Opposite Lots 1 and 2), Township of Mariposa, County of Victoria

Description:

New Permit to Take Water: King's Bay Development Corporation, c/o Quorum Development Corporation Inc.
Source of Water: 3 wells
Purpose of Taking: Drinking Water & Communal Supply
Period of Water Taking: July 1, 1999
Amount of Taking: 263 litres per minute
Length of Taking: Continuous for 10 years

Decision:

The Permit has been issued

Permit to Take Water 99-P-4025, Kings's Bay Development, was issued August 23, 1999.
The amount of water permitted was reduced to 234,000,000 L/day (234 cubic m/day).

Number of Comments Received: 0

Effect of the Comments on the Decision of the Ministry:

No comments were received resulting in no impact on the decision whether or not to proceed with this proposal.

May a resident of Ontario seek leave to appeal this decision (s. 38 EBR)?: Y

The EBR stipulates that the Ministry must make every reasonable step to ensure that all comments relevant to this proposal received as part of the public participation process are considered in this decision (S. 35 EBR). Only comments relevant to the proposal were considered in this decision.

Any resident of Ontario may seek leave to appeal this decision, by serving written Notice, within 15 days of the Decision Date noted above. The Notice must be served upon the following:

Environmental Commissioner:

Environmental Commissioner, 1075 Bay Street, Suite 605, 6th Fl.
Toronto, Ontario M5S 2B1
FAX: (416) 325-3370

Issuing Authority:

Director
Eastern Regional Office
Box 820, 133 Dalton Avenue
Kingston, Ontario, K7L 4X6
PHONE: (613) 549-4000 FAX: (613) 548-6908

Proponent:

King's Bay Dev. Corp. c/o Quorum Dev.
16 Esna Park Drive, Suite 107
Markham, Ontario, L3R 5X1

Appellate Body:

Environmental Appeal Board
Contact: The Secretary
2300 Yonge St., 12th Floor, P.O. Box 2382, Toronto, Ontario, M4P 1E4
PHONE: (416) 314-3300 FAX: (416) 314-3299

The Notice must be signed and dated and include all of the following information:

- **The EBR registry Number, the Ministry Reference Number, the Proponent's name and address to whom the instrument was issued and the location of Activity. (All available from this Registry posting)**
- **A copy of any comments that were submitted on the original proposal, if comments were not submitted, an explanation of your interest in seeking leave to appeal the decision is required.**

. **A description of the grounds for the application for leave to appeal including information that demonstrates that:**

(a) there is a good reason to believe that no reasonable person, having regard to the relevant law and any government policies developed to guide decisions of that kind, could have made the decision; and

(b) the decision in respect of which an appeal is sought could result in significant harm to the environment.

. **The portion of the instrument or each term or condition in the instrument in respect of which the leave to appeal is applied for.**

. **The grounds on which you intend to reply at the hearing, in the event that the leave to appeal is granted, in relation to each portion that you are seeking leave to appeal.**

EBR Registry Number: IA00E0261

Ministry Reference Number: ER-8789

Type of Posting: Instrument

Status of Posting: Decision

Ministry: Environment

Date Proposal Loaded: 2000/02/01

Date Decision Loaded: 2000/03/08

Comment Period: 30 **day(s)**

Written submissions were permitted between February 01, 2000 and March 02, 2000.

NOTICE OF **DECISION** FOR AN INSTRUMENT:

Instrument Type:

OWRA s. 34 - Permit to take water

Proponent:

Moira River Conservation Authority P. O. Box 698, Belleville, Ontario, K8N 5B3

Location of Activity:

Township of Thurlow

County/District/Region: County of Hastings

Other Activity Location Identifiers:

City of Belleville, Thurlow Ward (Canniflon)

Description:

Permit Renewal: 90-P-4053
Source of Water: Moira River
Purpose of Taking: Ice control dam to prevent flooding in Belleville - Arthur Holgate Dame
Period of Water Taking: February 2000
Amount of Taking: 11,000,00 Litres/day
Length of Taking: 10 years

Decision:

The Permit has been issued

Permit to Take Water 00-P-4029 was issued to Moira River Conservation Authority on March 6, 2000.

Number of Comments Received: 0

Effect of the Comments on the Decision of the Ministry:

No comments were received resulting in no impact on the decision whether or not to proceed with this proposal.

Alternatively, you may access an electronic copy of the decision and/or supporting documentation by clicking here:

http://www.ene.gov.on.ca/envision/env_reg/er/documents/pttw/2000/IA00E0261.pdf

May a resident of Ontario seek leave to appeal this decision (s. 38 EBR)?: Y

The EBR stipulates that the Ministry must make every reasonable step to ensure that all comments relevant to this proposal received as part of the public participation process are considered in this decision (S. 35 EBR). Only comments relevant to the proposal were considered in this decision.

Any resident of Ontario may seek leave to appeal this decision, by serving written Notice, within 15 days of the Decision Date noted above. The Notice must be served upon the following:

Environmental Commissioner:

Environmental Commissioner, 1075 Bay Street, Suite 605, 6th Fl.
Toronto, Ontario M5S 2B1
FAX: (416) 325-3370

Issuing Authority:

Director
Eastern Regional Office
Box 820, 133 Dalton Avenue
Kingston, Ontario, K7L 4X6
PHONE: (613) 549-4000 FAX: (613) 548-6908

Proponent:

Moira River Conservation Authority
P. O. Box 698
Belleville, Ontario, K8N 5B3

Appellate Body:

Environmental Appeal Board
Contact: The Secretary
2300 Yonge St., 12th Floor, P.O. Box 2382, Toronto, Ontario, M4P 1E4
PHONE: (416) 314-3300 FAX: (416) 314-3299

The Notice must be signed and dated and include all of the following information:

- **The EBR registry Number, the Ministry Reference Number, the Proponent's name and address to whom the instrument was issued and the location of Activity. (All available from this Registry posting)**
- **A copy of any comments that were submitted on the original proposal, if comments were not submitted, an explanation of your interest in seeking leave to appeal the decision is required.**

. **A description of the grounds for the application for leave to appeal including information that demonstrates that:**

(a) there is a good reason to believe that no reasonable person, having regard to the relevant law and any government policies developed to guide decisions of that kind, could have made the decision; and

(b) the decision in respect of which an appeal is sought could result in significant harm to the environment.

. **The portion of the instrument or each term or condition in the instrument in respect of which the leave to appeal is applied for.**

. **The grounds on which you intend to reply at the hearing, in the event that the leave to appeal is granted, in relation to each portion that you are seeking leave to appeal.**

EBR Registry Number: IA9E0744

Ministry Reference Number: 99P5025

Type of Posting: Instrument

Status of Posting: Decision

Ministry: Environment

Date Proposal Loaded: 1999/06/18

Date Decision Loaded: 1999/11/02

Comment Period: 30 **day(s)**

Written submissions were permitted between June 18, 1999 and July 18, 1999.

NOTICE OF **DECISION** FOR AN INSTRUMENT:

Instrument Type:

OWRA s. 34 - Permit to take water

Proponent:

Nickel District Conservation Authority 200 Brady Street, First Floor, Sudbury, Ontario, P3E 5K3

Location of Activity:

City Of Sudbury

County/District/Region: Regional Municipality of Sudbury

Other Activity Location Identifiers:

Lot 7, Concession 4, Neelon Twp.

Description:

This permit is required to bring the flood control structure on Romford Creek into compliance with section 34 of the OWR Act. The structure was originally constructed in September 0f 1997.
Amount of water is dependant on nature.

Decision:

Approval granted.

To issue permit No. 99P5025.

Number of Comments Received: 0

Effect of the Comments on the Decision of the Ministry:

No comments were received resulting in no impact on the decision whether or not to proceed with this proposal.

May a resident of Ontario seek leave to appeal this decision (s. 38 EBR)?: Y

The EBR stipulates that the Ministry must make every reasonable step to ensure that all comments relevant to this proposal received as part of the public participation process are considered in this decision (S. 35 EBR). Only comments relevant to the proposal were considered in this decision.

Any resident of Ontario may seek leave to appeal this decision, by serving written Notice, within 15 days of the Decision Date noted above. The Notice must be served upon the following:

Environmental Commissioner:

Environmental Commissioner, 1075 Bay Street, Suite 605, 6th Fl.
Toronto, Ontario M5S 2B1
FAX: (416) 325-3370

Issuing Authority:

Director
Central Region
5775 Yonge Street, 8th Fl.
Toronto, Ontario, M2M 4J1
PHONE: (416) 326-4825 FAX: (416) 325-6347

Proponent:

Nickel District Conservation Authority
200 Brady Street, First Floor
Sudbury, Ontario, P3E 5K3

Appellate Body:

Environmental Appeal Board
Contact: The Secretary
2300 Yonge St., 12th Floor, P.O. Box 2382, Toronto, Ontario, M4P 1E4
PHONE: (416) 314-3300 FAX: (416) 314-3299

The Notice must be signed and dated and include all of the following information:

. **The EBR registry Number, the Ministry Reference Number, the Proponent's name and address to whom the instrument was issued and the location of Activity. (All available from this Registry posting)**

. **A copy of any comments that were submitted on the original proposal, if comments were not submitted, an explanation of your interest in seeking leave to appeal the decision is required.**

. **A description of the grounds for the application for leave to appeal including information that demonstrates that:**
(a) there is a good reason to believe that no reasonable person, having regard to the relevant law and any government policies developed to guide decisions of that kind, could have made the decision; and
(b) the decision in respect of which an appeal is sought could result in significant harm to the environment.

. **The portion of the instrument or each term or condition in the instrument in respect of which the leave to appeal is applied for.**

. **The grounds on which you intend to reply at the hearing, in the event that the leave to appeal is granted, in relation to each portion that you are seeking leave to appeal.**

APPENDIX E: Data Listing from the ECO's Baseline Assessment of the PTTW Program

Environmental Registry Decision Notices for Permits to Take Water (PTTWs) and the Related PTTWs: May 1999 through March 31, 2000

Registry Number	Name of Company	MOE Issuing Office[1]	Notice Month/ Year	Water Source N= notice P= permit SW= surface water GW= ground water	Length of Permit? N= notice P= permit	Maximum Daily Quantity of Water Taking (or maximum capacity)[2] N= notice P= permit	Format of Max. Daily Quantity in PTTW[4]	Comments on Notice or Permit (link from notice to permit; details re: expiry date, permit date, quantity etc.)
IA9E0033	Georgian Aggregates & Construction Inc.	London	May/99	N= unclear P= SW - gravel pit pond	N= not stated P= 10 years	N&P= 2, 880, 000 IGPD	IGPD/LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit[3] - permit not dated
IA9E0275	Caitlyn Golf Academy	London	May/99	N&P= SW - Innisfil Creek and storage pond	N= not stated P= 5 years	N&P= creek 172, 800 IGPD pond 216, 000 IGPD	IGPD/LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA9E0316	Centre by the Bay	London	May/99	N&P= SW - St. Clair River	N= not stated P= 10 years	N&P= 275, 000 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA9E0326	Pointe West Golf Club	London	May/99	N&P= SW - Detroit River	N= not stated P= 10 years	N= 275, 000 U.S.GPD P= 204, 750 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA8E1047	Niagara Falls Golf Club	Hamilton	Jun/99	N&P= G/SW - 2 wells and 1 dugout pond	N&P= not stated	N= no daily maximum only 2, 455 LPM P= wells 916,162 LPD and pond 436, 000 LPD	IGPD/LPD	- no electronic link to permit - no expiry date on PTTW - permit dated in Apr/99

Registry Number	Name of Company	MOE Issuing Office[1]	Notice Month/ Year	Water Source N= notice P= permit SW= surface water GW= ground water	Length of Permit? N= notice P= permit	Maximum Daily Quantity of Water Taking (or maximum capacity)[2] N= notice P= permit	Format of Max. Daily Quantity in PTTW[3]	Comments on Notice or Permit (link from notice to permit; details re: expiry date, permit date, quantity etc.)
IA9E0560	Santa Maria Trailer Resort Ltd.	Thunder Bay	Jun/99	N&P= GW - 2 wells - 1 existing and 1 proposed	N= not stated P= 9 years	N= 32, 610 IGPD unclear if combined quantity P= 32, 610 IGPD combined quantity	IGPD	- no electronic link to permit - permit dated in Jun/99
IA9E0299	United Canadian Malt Ltd.	Kingston	Jun/99	N&P= GW - 4 wells	N= indefinite P= 10 years	N= no daily maximum just 683 LPM P= 150, 000 LPD combined quantity	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jun/99
IA9R0104	Inco Ltd. Ontario Div, Gen. Eng. Building, Copper Cliff	Thunder Bay	Jun/99	N&P= SW - Onaping River	N&P= 10 years	N= no daily maximum just 1, 667 IGPM P= 2, 416, 000 IGPD	IGPD/U.S.GPD	- no electronic link to permit - permit dated in Mar/99 - permit is to amend pervious permit by increasing amount
IA9E0036	North Granite Ridge Golf Centre	London	Jun/99	N&P= GW - 2 wells	N&P= not stated	N= 600, 000 LPD unclear if combined quantity P= 477, 360 LPD combined quantity	LPD	- no electronic link to permit - permit not dated - permit missing expiry date
IA9E0411	Longmuir & Co. Builders Ltd.	Kingston	Jun/99	N= GW - 1 well P= GW - 2 wells	N= indefinite P= 10 years	N= no daily maximum just 79 LPM P= 170, 000 LPD combined quantity	LPD	- no electronic link to the permit - expiry date noted under "Special Conditions" of permit - permit dated in Jun/99
IA9E0523	Zenon Environmental Inc.	Toronto	Jun/99	N&P= GW - 1 well	N= 20 years P= 10 years	N= 43, 200 IGPD P= 12, 540 IGPD	IGPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jun/99
IA9E0043	E.D. Smith and Sons Ltd.	Hamilton	Jun/99	N&P= SW - Lake Ontario	N&P= not stated	N= 5, 909, 800 LPD P= 5, 891, 616 LPD	IGPD/LPD	- no electronic link to permit - permit missing expiry date - permit dated in May/99

Registry Number	Name of Company	MOE Issuing Office[1]	Notice Month/ Year	Water Source N= notice P= permit SW= surface water GW= ground water	Length of Permit[2] N= notice P= permit	Maximum Daily Quantity of Water Taking (or maximum capacity)[3] N= notice P= permit	Format of Max. Daily Quantity in PTTW[4]	Comments on Notice or Permit (link from notice to permit; details re: expiry date, permit date, quantity etc.)
IA9E0074	Lynbrook Family Golf Centre Inc.	Hamilton	Jun/99	N&P= G/SW - 1 well and 3 ponds	N= not stated P= 10 years	N&P= 48, 060 LPD	LPD	- no electronic link to permit - permit dated in Apr/99
IA9E0038	Victor Ruffolo Ltd.	Hamilton	Jun/99	N&P= GW - 3 wells	N&P= not stated	N= 90, 908 LPD combined quantity implied P= 90, 920 LPD combined quantity implied	IGPD/LPD	- no electronic link to permit - permit missing expiry date - permit dated in May/99
IA9E0045	Courtlea Mobile Park	Hamilton	Jun/99	N&P= GW - 5 wells	N&P= not stated	N= 154, 545 LPD P= 154, 564 LPD	IGPD/LPD	- no electronic link to permit - permit missing expiry date - permit dated in Apr/99
IA9E0037	Country Meat Packers	Hamilton	Jun/99	N&P= GW - 1 well	N&P= not stated	N&P= 195, 478 LPD	IGPD/LPD	- no electronic link to permit - permit missing expiry date - permit dated in Apr/99
IA9E0044	Adam Young	Hamilton	Jun/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 392, 774 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Apr/99
IA9E0100	Garry Charles McDonald	Hamilton	Jun/99	N&P= GW - 1 flowing drilled well	N&P= not stated	N&P= 63, 644 LPD	IGPD/LPD	- no electronic link to permit - permit missing expiry date - permit dated in May/99
IA7E0431	Donald B. Mosher	Thunder Bay	Jul/99	N&P= SW - Big Vermillion Lake	N= unclear P= 3 years	N&P= 10, 000, 000 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Aug/97
IA9E0724	Brunswick House First Nation	Thunder Bay	Jul/99	N= SW - Borden Lake implied P= SW - Borden Lake	N= 20 years implied P= "in perpetuity"	N&P= 366, 750 LPD	LPD	- no electronic link to permit - indefinite expiry date - permit dated in Jul/99

Registry Number	Name of Company	MOE Issuing Office[1]	Notice Month/ Year	Water Source N= notice P= permit SW= surface water GW= ground water	Length of Permit[2] N= notice P= permit	Maximum Daily Quantity of Water Taking (or maximum capacity)[3] N= notice P= permit	Format of Max. Daily Quantity in PTTW[4]	Comments on Notice or Permit (link from notice to permit; details re: expiry date, permit date, quantity etc.)
IA9E0540	Kareff Properties Ltd. Carlisle Golf and Country Club	Hamilton	Jul/99	N= SW - pond formed by dam P= SW - 1 dammed pond and 1 dugout storage pond	N= not stated P= 5 years	N= 454, 545 LPD (one source) P= maximum from either source 454, 545 LPD (not concurrent drawing)	IGPD/LPD	- no electronic link to permit - permit dated in Jul/99
IA9E0287	Peter & Joan Tax	Toronto	Jul/99	N= SW - Soper Creek P= SW - Soper Creek and dugout pond	N= not stated P= 10 years	N= no daily maximum just 700-800 IGPD for Soper Creek P= 3, 704, 640 LPD combined quantity	IGPD/LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jul/99
IA8E1229	Pacific Regeneration Technologies	Thunder Bay	Jul/99	N&P= SW - Wabigoon River	N= "indefinite" P= 10 years	N&P= 187, 000 LPD	LPD	- no link to electronic link to permit - permit dated in Oct/98
IA8E1324	Sunshine Landscaping Co. Ltd.	Thunder Bay	Jul/99	N&P= SW - Slate River	N= not stated P= 10 years	N&P= 24, 000 IGPD	IGPD	- no electronic link to permit - permit dated in Nov/98
IA9E0735	Ducks Unlimited Barrie Division	Thunder Bay	Jul/99	N= unclear P= SW - unnamed stream	N= not stated P= 10 years	N= not stated P= 3, 400, 000 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jul/99
IA9E0107	Nova Chemicals (Cnd.) Ltd.	Hamilton	Jul/99	N&P= G/SW - 1 trench and 1 well	N= not stated P= 5 years	N&P= 129, 600 LPD combined quantity	LPD	- no electronic link to permit - permit dated in Jul/99
IA9E0373	Makerry Holdings Inc.	Hamilton	Jul/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 362, 900 LPD combined quantity	IGPD/LPD	- no electronic link to permit - permit dated in Jul/99
IA9E0479	Grand River Estates Inc.	Hamilton	Jul/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 884, 160 LPD combined quantity	IGPD/LPD	- no electronic link to permit - permit dated in Jul/99
IA9E0039	Braeside Bible Conference	Hamilton	Jul/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 648, 000 LPD	LPD	- no electronic link to permit - permit dated in Jul/99

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IA9E00731	Pullen Brothers Construction Ltd.	Hamilton	Jul/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 737, 280 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Jul/99
IA9E0065	Pine Meadow Retirement Community Ltd.	Hamilton	Jul/99	N&P= GW - 2 wells	N= not stated P= 10 years	N= 1,176,768 LPD combined quantity P= 1,178,320 LPD combined quantity	IGPD/LPD	- no electronic link to permit - expiry in "Special Conditions" of permit - permit dated in Jul/99
IA7E1432	759857 Ontario Ltd.	Hamilton	Jul/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 2,779,200 LPD combined quantity	IGPD/LPD	- no electronic link to actual permit - permit dated in Jul/99
IA9E0378	Foxboro Green Inc.	Hamilton	Jul/99	N&P= GW - 3 wells; notice doesn't specify that it is for 2 different permits	N= not stated P= 1 PTTW - 10 years and subsequently cancelled Nov/99; and 1 PTTW - 4 years	N&P= 482, 435 LPD combined quantity in notice and between both permits	IGPD/LPD for both permits	- no electronic link to permit - two permits for same proponent under one registry number - both permits dated in Jul/99 - the 10 year permit was cancelled by MOE in Nov/99 due to lack of use of well
IA9E0056	Goldman Hotels Inc.	Hamilton	Jul/99	N&P= GW - 4 wells	N= not stated P= 10 years	N&P= 54, 552 LPD combined quantity	IGPD/LPD	- no electronic link to permit - permit dated in Jul/99
IA9E0727	Rockwell Automation of Canada Inc.	Hamilton	Jul/99	N&P= GW - 4 wells	N= not stated P= 10 years	N&P= 46, 080 LPD combined quantity	IGPD/LPD	- no electronic link to permit - permit dated in Jul/99
IA9E0049	Old Mill Campgrounds Weston Lake	Thunder Bay	Aug/99	N&P= SW - Weston Lake	N= not stated P= 10 years	N&P= 135, 000 LPD	LPD	- no electronic link to permit - permit dated in Sept/99 (note - decision notice published prior to permit being issued)
IA9E0739	St. Andrew Goldfields Ltd.	Thunder Bay	Aug/99	N&P= unclear	N= not stated P= 5 years	N&P= 2, 880, 000 LPD	LPD	- no electronic link to permit - permit dated in Jul/99

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IA9E0414	Haliburton Highlands Outdoor Association	Kingston	Aug/99	N&P= GW - 1 well	N&P= 1 year	N= no daily maximum only 270 LPM P= 388, 800 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jul/99
IA9E0396	Robins Holdings Inc.	Kingston	Aug/99	N= GW - 2 wells P= GW - 3 wells	N&P= 1 year	N= no daily maximum only 197.5 LPM P= 284, 000 LPD combined quantity	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Aug/00
IA9E0729	Rideau Carleton Raceway	Kingston	Aug/99	N&P= GW - 1 well	N&P= 5 years	N= no daily maximum only 380 LPM P= 532, 000 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Aug/99
IA8E1333	James Sheldon	London	Aug/99	N= GW - 3 wells P= GW - 2 wells	N= not stated P= 5 years	N= 1, 296, 000 U.S.GPD combined quantity P= 2, 725, 488 LPD combined quantity	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA9E0404	Knights of Columbus Council	London	Aug/99	N&P = GW - 1 well	N= not stated P= 10 years	N&P= 52, 500 LPD	LPD	- no electronic link to permit - expiry date noted in "Special Conditions" of permit - permit not dated
IA9E0268	Elliot Water System	Hamilton	Aug/99	N&P= GW - 1 well	N= not stated P= 10 years	N= 69, 120 IGPD P= 314, 220 LPD	LPD	- no electronic link to permit - expiry date noted in "Special Conditions" under PTTW . - permit not dated
IA9E0047	Coldpoint Properties Ltd.	Hamilton	Aug/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 654, 624 LPD	IGPD/LPD	- no electronic link to permit - permit dated Aug/99

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IA9E0785	King's Bay Dev. Corp.	Kingston	Aug/99	N&P= GW - 3 wells	N&P= 10 years	N&P= 234, 000, 000 LPD combined quantity	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - note what appears to be a large discrepancy in quantity in the permit itself: if one adds up the maximum quantities permitted for each well the total = 302,000 LPD but, the permit goes on to specify that "the combined total volume taken from the three water supply wells shall not exceed 234, 000, 000 LPD" (a whole lot more) - permit dated in Aug/99
IA9E0537	Canada Talc Ltd.	Kingston	Aug/99	N&P= unclear	N&P= 10 years	N= no daily maximum only 1, 000 IGPM P= 1, 152, 000 IGPD	IGPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Aug/99
IA9E0046	Safety-Kleen Canada Inc.	Hamilton	Aug/99	N&P= GW - 4 wells	N= not stated P= 10 years	N= 425, 500 LPD combined quantity P= 425, 505 LPD combined quantity	IGPM/LPD	- no electronic link to permit - permit dated in Aug/99
IA8E0659	Total Forest Industries Ltd.	Hamilton	Aug/99	N&P= GW - 1 well	N= not stated P= 10 years	N&P= 18, 000 IGPD	IGPD/LPD	- no electronic link to permit - permit dated in Aug/99
IA9E0542	Burgoyne Water Association	London	Aug/99	N&P= GW - 1 well	N= not stated P= 10 years	N= 20, 000 IGPD P= 20, 000 LPD	IGPD/LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA8E1478	Agrium Products Inc.	Thunder Bay	Aug/99	N&P= SW - Cargill Lake	N= 13 years P= 10 years	N= no daily maximum just 43 m^3/hour P= 1, 200, 000 LPD	LPD	- no electronic link to permit - permit dated in Jan/99

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IA8E1322	Kevin Runnalls	Thunder Bay	Aug/99	N&P= SW - Hudson Creek	N= not stated P= 5 years	N= no daily maximum just 800 IGPM P= 90, 000 LPD	IGPD/LPD	- no electronic link to permit - MOE cover letter attached to permit has a date of Nov. 5/98 and the permit issue date is Nov. 5/98 - however, both the letter and the permit state that water taking will begin Sept 15/98
IA8E1527	Kinross Gold Corp	Thunder Bay	Aug/99	N&P= SW - lake shore pond	N= not stated P= 5 years	N&P= 3, 800, 000 LPD	LPD	- no electronic link to permit - permit dated in Dec/98 - MOE cover letter and permit are different in terms of the beginning and end dates for the water taking - the MOE cover letter is dated Dec. 22/98 and states that water taking will begin Dec. 19/98 and end Dec. 19/03 - however the permit issued Dec. 22/98 states that water taking will begin Dec. 31/98 and end Dec. 31/03
IA9E0441	A. Brett Clemens	Kingston	Aug/99	N&P= SW - Scotch River	N&P= 10 years	N= no daily maximum just 15 IGPM P= 12, 000 IGPD	IGPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jul/99

Registry Number	Name of Company	MOE Issuing Office[3]	Notice Month/ Year	Water Source N= notice P= permit SW= surface water GW= ground water	Length of Permit[4] N= notice P= permit	Maximum Daily Quantity of Water Taking (or maximum capacity)[5] N= notice P= permit	Format of Max. Daily Quantity in PTTW[6]	Comments on Notice or Permit (link from notice to permit; details re: expiry date, permit date, quantity etc.)
IA9E0726	The Landings Golf Course & Teaching Centre	Kingston	Aug/99	N&P= SW - Lake Ontario	N&P= 20 years	N= no daily maximum only 600 IGPM P= 864, 000 IGPD	IGPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - note that the documentation sent by MOE contains an amendment (cover letter and permit (dated Feb/00) reducing the length of the permit to 10 Years (ministry notes that they no longer issue 20 year permits) - I printed the Registry notice that would relate to the new permit - there are discrepancies between the new Registry notice and new permit, as well as discrepancies between the new permit and the first permit - in terms of the source and quantities of water
IA9E0413	Mr. John Rochn	Kingston	Aug/99	N= SW - 1 pond and rainfall P= SW - unnamed tributary to Mississippi River Basin	N= "indefinite" P= not stated	N= no daily max. only 198, 000 LPM P= 13, 000, 000 LPD	LPD	- no electronic link to permit - permit missing expiry date - permit dated in Jul/99
IA9E0433	Bigwin Resort and Development Corp.	London	Aug/99	N&P= SW - Lake of Bays	N= not stated P= 5 years	N= 650, 000 U.S.GPD P= 2, 460, 510 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit missing issue date
IA9E0478	Cytec Canada Inc.	Hamilton	Aug/99	N&P= SW - Welland River	N= not stated P= 5 years	N&P= 50, 400, 000 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Aug/99

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IA9E0355	Grey Sauble Conservation Authority	London	Aug/99	N= not stated P= SW - Hepworth Creek	N= not stated P= 10 years	N= 85, 300, 000 IGPD P= 85, 300, 000 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit missing issue date
IA9E0123	Ihor Pashynsky	Hamilton	Sept/99	N&P= GW - 1 well	N= not stated P= 2 years	N&P= 1, 112, 860 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Sept/99
IA9E0438	Granite Golf c/o Granite Club Ltd.	Toronto	Sept/99	N= well P= S/GW - 1 well and 1 pond	N= not stated P= 10 years	N= unclear P= well quantity 1, 155, 400 LPD and pond quantity 2, 200, 000 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jul/99
IA9E0064	Canvil Ltd	Hamilton	Sept/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 72, 000 IGPD	IGPD/LPD	- no electronic link to permit - permit dated in Sept/99
IA9E0581	Lakeridge Precision Inc.	Toronto	Sept/99	N&P= GW - 1 drilled well	N= 20 years P= 1 year	N= no daily maximum only 83.5 IGPM P= 120, 240 IGPD	IGPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jul/99

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IA9E0820	Makerry Holding Inc.	Hamilton	Sept/99	N&P= GW - 2 wells	N= not stated P= 10 years	N&P= 70, 000 IGPD	IGPD	- no electronic link to permit - permit dated in Sept/99 - note that in the permit copy sent to ECO by MOE, MOE attached a copy of a citizen's letter (Aug/99) expressing concern about this taking and others posted on the Environmental Registry for the Spencer Creek area and inquiring about whether or not MOE was considering overall sustainability of the area and the drought condition when issuing permits for this area (also advocates that MOE use water budget approach)
IA9E0989	Puslinch Lake Conservation Association	Hamilton	Sept/99	N&P= SW - Puslinch Lake	N= not stated P= 1 year	N&P= 3, 000, 000 U.S.GPD	U.S.GPD/LPD	- no electronic link to permit - permit dated in Sept/99
IA8E1509	Clublink Capital Corp.	Toronto	Sept/99	N&P= G/SW - 2 ponds and 1 well	N= not stated P= 10 years	N= 746, 600 IGPD combined quantity P= 757, 150 IGPD combined quantity	IGPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jul/99
IA6E1479	Bill Waterhouse & Associates	London	Sept/99	N&P= GW - 1 well	N= unclear P= 10 years	N= 369, 300 LPD P= 123, 100 LPD	LPD	- no electronic link to permit - permit dated in Dec/96 - related to notice below IA8E1745

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IA8E1745	Bill Waterhouse & Associates	London	Sept/99	N= not stated P= GW - 1 or more wells	N&P= not stated	N&P= 369, 300 LPD	LPD	- no electronic link to permit - permit missing issue date - this is a permit amendment and not all information is included (just the amended parts) in the information provided by MOE BUT this is related to the above-noted permit IA6E1479 - note that the permit issue date is Aug/98 but MOE's cover letter regarding the amendment is dated Aug/00 (MOE's letter date of "2000"doesn't make sense based on notice date in 1999)
IA9E0300	Bertrand Construction L'Orignal Inc.	Kingston	Sept/99	N&P= unclear	N&P= 10 years	N= no daily maximum only 400 IGPM P= 240, 000 IGPD	IGPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit missing issue date but MOE cover letter dated Aug/99
IA9E0902	Iogen Corp.	Kingston	Sept/99	N&P= GW - 1 well	N&P= 5 years	N= no daily maximum only 200 LPM P= 288, 000 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Sept/99
IA8E0066	CGC Inc.	Hamilton	Oct/99	N&P= G/SW - groundwater mine dewatering and dugout pond	N= not stated P= 5 years	N= mine sump 1, 450, 000 IGPD and pond 576, 000 IGPD P= sump - March - June: 1, 700, 000 IGPD July - Feb : 1, 400, 000 IGPD; pond - 576, 000 IGPD	IGPD	- no electronic link to permit - permit dated in Sept/99

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IA9E1035	Kay Taylor	Thunder Bay	Oct/99	N= GW - 3 wells P= GW - "well"	N&P= 10 years	N= 78, 555 LPD P= 17, 280 IGPD	IGPD	- no electronic link to permit - permit dated in Oct/99 BUT the permit itself states that water taking will begin on Apr/99 (this is probably because it's a permit renewal, but are there compliance legal appeal right issues here due to the discrepancy?)
IA9E0839	Ducks Unlimted	Hamilton	Oct/99	N&P= SW - excavated ditches for storage	N= not stated P= 5 years	N&P= 47, 300, 000 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Oct/99
IA9E0988	Canvil Ltd.	Hamilton	Oct/99	N&P= GW - 1 well	N= not stated P= 10 years	N&P= 35, 100 IGPD	IGPD/LPD	- no electronic link to permit - permit dated in Oct/99
IA9E0467	Ducks Unlimited Canada Kingston Div.	Kingston	Oct/99	N= SW - precipitation and runoff P= SW - unnamed tributary to the Gananoque River	N= "continuous" P= 10 years	N= no daily maximum only 47, 300 IGPM P= maximum quantity of reservoir storage 75 Acre Feet	Acre Feet	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Oct/99
IA9E0841	Ducks Unlimited	Hamilton	Oct/99	N&P= SW - impounded kettle pond	N= not stated P= 5 years	N&P= 1, 570, 000 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Oct/99
IA9E1031	Beaver Valley Ski Club	London	Nov/99	N&P= SW - Beaver River	N= not stated P= 5 years	N= 2, 880, 000 IGPD P= 13, 092, 480 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated

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IA9E0746	Nickel District Conservation Authority	Thunder Bay	Nov/99	N= SW - Junction Creek implied P= SW - Junction Creek	N= not stated P= 10 years	N= "dependent on nature" P= not stated	not stated	- no electronic link to permit - permit missing quantity - permit dated in Oct/99
IA9E0744	Nickel District Conservation Authority	Thunder Bay	Nov/99	N= SW - Romford Creek implied P= SW - Romford Creek	N= not stated P= 10 years	N= "dependent on nature" P= not stated	not stated	- no electronic link to permit - permit missing quantity - permit dated in Oct/99
IA9E0745	Nickel District Conservation Authority	Thunder Bay	Nov/99	N= SW - Junction Creek implied P= SW - Junction Creek	N= not stated P= 10 years	N= "dependent on nature" P= not stated	not stated	- no electronic link to permit - permit missing quantity - permit dated in Oct/99
IA9E1162	Carleton Golf & Yacht Club	Kingston	Nov/99	N&P= SW - Rideau River	N&P= 10 years	N= no daily maximum only 500 IGPM P= 1, 363, 800 LPD	IGPD/LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Nov/99
IA9E0126	Blue Circle Aggregates	Hamilton	Nov/99	N&P= SW - 1 pond	N= not stated P= 10 years	N&P= 11, 783, 465 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0132	Blue Circle Aggregates	Hamilton	Nov/99	N&P= SW - 1 pond	N= not stated P= 10 years	N&P= 7, 855, 644 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0069	Ducks Unlimited Canada	Hamilton	Nov/99	N&P= SW - 1 on stream pond	N= not stated P= 5 years	N= 2, 540, 000 LPD P= 2, 534, 400 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0539	Mori Nurseries Ltd.	Hamilton	Nov/99	N&P= SW - Niagra River	N= not stated P= 10 years	N= 3, 273, 120 LPD P= 3, 272, 727 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99

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IA9E1110	Norton Adv. Ceramics of Canada Inc.	Hamilton	Nov/99	N&P= SW - Welland River	N= not stated P= 10 years	N= 5, 328, 800 IGPD P= 2, 160, 000 IGPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA8E1192	Ducks Unlimited	Hamilton	Nov/99	N&P= SW - on stream pond on Welland River	N= not stated P= 5 years	N= 14, 200, 000 LPD P= 14, 112, 000 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0064	Slovenski Park Ltd.	Hamilton	Nov/99	N&P= SW - Aberfoyle Creek	N&P= 5 years	N= 137, 470 LPD P= 163, 660 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0063	Cedar Highlands Ski Club	Hamilton	Nov/99	N&P= SW - Nottawasaga River	N&P= 5 years	N&P= 227, 300 LPD	IGPD/LPD	- no electronic link to permit - note that the Registry notice states that the ministry decided not to issue the permit, but then goes on to indicate the permit's expiry date and MOE sent us the permit - permit dated in Nov/99
IA9E1013	Poplars Golf Club	Kingston	Nov/99	N= SW - "river" P= SW - Moira River	N&P= 10 years	N= no daily maximum only 400 IGPM P= 386, 070 LPD	U.S.GPD/LPD	- no electronic link to permit - expiry dated noted in "Special Conditions" of permit - permit dated in Nov/99
IA9E1254	Clublink Capital Corp.	Kingston	Nov/99	N&P= SW - 21 dugout ponds	N&P= 10 years	N= no daily maximum only 2, 000 IGPM P= 2, 300, 000 LPD	IGPD/LPD	- electronic link to permit - expiry date noted under "Special Conditions" of PTTW - permit dated Nov/99
IA9E0716	Blue Circle Aggregates	Kingston	Nov/99	N&P= GW - 1 well	N&P= 5 years	N= no daily maximum only 2, 273 LPM P= 1, 363, 800 LPD	LPD	- no electronic link to permit - expiry date noted under "Special Conditions" in PTTW - permit dated in Oct/99
IA9E0579	Nacan Products Ltd.	Hamilton	Nov/99	N&P= GW - 4 wells	N= not stated P= 10 years	N&P= 12, 960 IGPD combined quantity	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99

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IA9E1002	Cootenga Family Camp Grounds Inc.	Hamilton	Nov/99	N&P= GW - 1 well	N= not stated P= 10 years	N&P= 37, 440 IGPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0987	Quinte's Isle Campark	Kingston	Nov/99	N&P= GW - 1 well	N&P= 10 years	N= no daily maximum only 205 LPM P= 80, 000 LPD	LPD	- no electronic link to permit - expiry contained in "Special Conditions" of permit - permit dated in Nov/99
IA9E0384	Magnetic Metals Ltd.	Hamilton	Nov/99	N&P= GW - 1 well	N= not stated P= 10 years	N&P= 392, 774 LPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0877	Groen's Nursery Ltd.	Hamilton	Nov/99	N= GW - 2 wells P= G/SW - 2 wells and 1 dugout pond	N= not stated P= 10 years	N= 166, 384 LPD from wells P= 227, 300 LPD "from either source"	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA8E1628	Placer Dome Canada Ltd. Musselwhite Mine	Thunder Bay	Nov/99	N&P= GW - underground mine	N= not stated P= 10 years	N= no daily maximum only 4, 167 LPM P= 6, 000, 480 LPD	LPD	- no electronic link to permit - amendment effective Feb. 22/99 - note that this permit is an amendment to the quantity; original permit issued in 1996 with an expiry date of 2006 - so a 10 year permit
IA9E1224	Noranda Inc. Geco Div.	Thunder Bay	Nov/99	N&P- SW - Harry's Creek	N&P= 10 years	N&P= 2, 900, 000 U.S.GPD	U.S.GPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E0859	Kat Okashimo Fish Farm	Hamilton	Nov/99	N&P= GW - 1 well	N&P= 10 years	N&P= 360, 000 IGPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E1114	Charles Kovacs	Hamilton	Nov/99	N&P= GW - 4 wells	N&P= 5 years	N&P= 1, 505, 635 LPD combined quantity implied	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99

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IA9E1260	St. Albert Coop Cheese	Hamilton	Nov/99	N&P= GW - 2 wells	N&P= 10 years	N= 48, 707, 535 LPD "average" P= 48, 709 LPD combined quantity	LPD	- electronic link to permit - expiry date contained in "Special Conditions" of permit - permit dated in Nov/99
IA9E1147	Outboard Marine Corp. Of Canada Ltd..	Kingston	Nov/99	N&P= GW - 2 wells	N&P= 5 years	N= no daily maximum only 100 IGPM P= 654, 624 LPD	IGPD/LPD	- electronic link to permit - expiry contained in Special Conditions" of permit - permit dated in Nov/99
IA9E0915	Dundas Valley Golf and Curling Club	Hamilton	Nov/99	N=G/SW - well, dam and pond P= GW - 1 well	N= not stated P= 10 years	N= well - 360,000 IGPD, dam - 260,000 IGPD pond - 620,000 IGPD P= 360, 000 IGPD for well	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99 - not clear why the dam and pond source don't appear in the permit
IA9E1122	Cox Farms Ltd.	Hamilton	Nov/99	N&P= G/SW - 1 well and Lutteral Creek	N&P= 5 years	N&P= well - 86,400 IGPD creek - 144, 000 IGPD	IGPD/LPD	- no electronic link to permit - permit dated in Nov/99
IA9E1195	Westcoast Power Inc.	Thunder Bay	Nov/99	N= not stated P= SW - Rainy River	N= not stated P= 10 years	N= not stated P= 1.54×10^8 LPD	LPD	- no electronic link to permit - permit dated in Nov/99 - note that permit allows water to be taken prior to the date shown on the permit but perhaps this is because it is a renewal
IA9E0546	John E. & Andrew R. Wright	Kingston	Nov/99	N&P= SW - Adolphus Reach	N&P= 10 years	N= no daily maximum only 500 U.S.GPM P= 720, 000 U.S.GPD	U.S.GPD/LPD	- no electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Nov/99
IA9E0536	Mori Nurseries Ltd.	Hamilton	Dec/99	N&P= SW - pond on Four Mile Lake	N&P= 5 years	N= 1, 309, 250 LPD P= 1, 309, 090 LPD	IGPD/LPD	- electronic link to permit - permit not dated

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IA9E1181	Talisman Mountain Resort	London	Dec/99	N&P= SW - Beaver River and a spring	N&P= 10 years	N= 23, 041, 200 LPD combined quantity P= 21, 657, 144 LPD combined quantity	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Dec/99
IA9E1177	Dow Chemical Canada Inc.	London	Dec/99	N&P= SW -St. Clair River	N&P= 10 years	N= 1, 575, 100, 000 LPD P= 1, 573, 370, 600 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Dec/99
IA9E0273	Tilbury Golf & Curling Club	London	Dec/99	N= SW - pond P= SW - pond and greens/tile	N&P= 5 years	N= 18, 000 IGPD P= 163, 656 LPD combined quantity	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Nov/99
IA9E0376	Ducks Unlimited Canada	Hamilton	Dec/99	N= SW - on stream pond on unnamed watercourse P= SW - dyke on Thompson Creek draining to Grand River	N&P= 5 years	N&P= 711, 360 LPD	IGPD/LPD	- electronic link to permit - permit not dated
IA9E0222	Ducks Unlimited Canada	Hamilton	Dec/99	N= SW - 1 on stream pond P= SW - dyke on unnamed watercourse draining to Hunger Lake	N&P= 5 years	N= 1, 220, 000 LPD P= 1, 219, 680 LPD	IGPD/LPD	- electronic link to permit - permit not dated

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IA9E0067	Strudex Fibres Ltd.	Hamilton	Dec/99	N&P= GW - 2 wells	N&P= 10 years	N= 1, 636, 560 LPD (appears to be for each well since the amount is repeated) P= 1, 636, 560 LPD (combined quantity)	IGPD/LPD	- electronic link to permit - permit not dated
IA9E0556	A.D.M. Milling Co.	Hamilton	Dec/99	N&P= GW - 1 well	N&P= 10 years	N&P= 1, 636, 560 LPD	IGPD/LPD	- electronic link to permit - permit not dated
IA9E0004	1307017 &584379 Ontario Ltd. - Premier Golf Course (according to Notice) OR 1336112 Ont. Ltd. - Maples of Ballantrae Golf Course (according to Permit)	Toronto	Dec/99	N= "groundwater" P= GW - deep irrigation well	N&P= 5 years	N&P= 1, 296, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Apr/99
IA0E0852	Steed and Evans Ltd.	Hamilton	Dec/99	N&P= GW - 1 well	N&P= 10 years	N= 68, 190 LPD P= 68, 000 LPD	IGPD/LPD	- electronic link to permit - permit not dated
IA9E1130	Peter Kegels	Hamilton	Dec/99	N&P= GW - 1 well	N&P= 10 years	N= 158, 400 IGPD P= 158, 380 IGPD	IGPD/LPD	- electronic link to permit - permit not dated
IA9E1014	Kakabeka Crystal	Thunder Bay	Dec/99	N&P= GW - 2 wells	N&P= 2 years	N= 76, 376 LPD (combined quantity implied) P= 76, 373 LPD (combined quantity)	LPD	- electronic link to permit - permit dated in Dec/99 - notice explains that proponent had made an error in converting the proposed quantity from U.S.GPD to LPD

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IA9E1754	Cornwall General Hospital	Kingston	Jan/00	N&P= GW - 1 well	N&P= 10 years	N= no daily maximum just 350 LPM P= 504, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jan/00
IA9E1194	Lafarge Canada Inc.	Kingston	Jan/00	N&P= G/SW - 2 wells and 1 pond	N&P= 10 years	N= no daily maximum just 3, 900 U.S GPM source not specified P= quarry - 3,785,000 LPD, sandpit - 9,084,000 LPD and well - 190 LPW	U.S GPD/LPD/ U.S GPW/LPW	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jan/00
IA9E1263	3237532 Canada Inc.	Kingston	Jan/00	N= GW - 3 wells P= G/SW - 3 wells, 1 irrigation pond, 2 storm water ponds	N&P= 10 years	N= no daily maximum only 345 LPM P= SW - 15, 760, 509 LPD combined quantity GW - 110, 000 LPD combined quantity (but only 2/3 wells can operate at any time)	IGPD/LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - notice notes that another permit has been incorporated, but the notice doesn't reflect that information - permit dated in Jan/00
IA9E1319	Ducks Unlimited Canada	London	Jan/00	N&P= SW - "surface runoff"	N&P= 9 years	N&P= 1, 830, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Sept/99
IA9E0747	Rainy Lake Golf and Country Club	Thunder Bay	Jan/00	N&P= SW - intermittent stream crossing golf course	N= not stated P= 10 years	N&P= 1, 091, 030 LPD	IGPD/LPD	- electronic link included - permit dated in Dec/00
IA9E1315	Lac Seul First Nation	Thunder Bay	Jan/00	N&P= SW - Lost Lake	N&P= 10 years	N= 319, 680 LPD P= 86, 400 LPD	LPD	- electronic link included - permit dated in Dec/00

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IA9E0466	Ducks Unlimited Canada	Kingston	Jan/00	N= SW - precipitation and runoff P=SW - unnamed tributary to Trent River	N= continuous P= 10 years	N= no daily maximum only 31, 850 IGPM P= maximum capacity 74, 016, 000L/ 60 Acre Feet	Litres/Acre Feet	- electronic link included - expiry date noted under "Special Conditions" of permit - permit dated in Jan/00
IA9E1334	Wellington on the Lake Golf Course	Kingston	Jan/00	N&P= SW - Lake Ontario	N&P= 10 years	N&P= 918, 936 LPD	IGPD/LPD	- electronic link included - expiry date noted under "Special Conditions" of permit - permit dated in Jan/00
IA9E1296	Crowe Valley Conservation Authority	Kingston	Jan/00	N&P= SW - Crowe River	N&P= 10 years	N= no daily maximum only 1,560m^3/minute P= 2, 246, 400, 000 LPD	LPD	- electronic link included - expiry date noted under "Special Conditions" of permit - permit dated in Jan/00
IA9E1667	Raisin Region Conversation Authority	Kingston	Jan/00	N&P= SW - Raisin River	N&P= 10 years	N= no daily maximum only 9, 769, 800 LPM P= 1.407×10^{10} LPD	LPD	- electronic link included - expiry date noted under "Special Conditions" of permit - permit dated in Jan/00
IA9E1365	E.D. Smith and Sons Ltd.	Hamilton	Jan/00	N&P= SW - Lake Ontario	N&P= 4 years	N&P= 1, 296, 000 IGPD	IGPD/LPD	- electronic link included - permit not dated
IA9E0453	Fernbrook Natural Springs Water Co.	Hamilton	Feb/00	N&P= GW - 2 wells	N&P= 2 years	N= 327m^3/day P= 327, 312 LPD	IGPD/LPD	- electronic link included - permit not dated
IA9E0035	Nichols Gravel Ltd.	Hamilton	Feb/00	N&P= SW - 1 dugout pond	N&P=10 years	N= 1, 640, 000 LPD P= 1, 636, 560 LPD	IGPD/LPD	- electronic link included - permit not dated
IA9E9462	Fernbrook Natural Spring Water Co.	Hamilton	Feb/00	N&P= GW - 1 well	N&P= 2 years	N&P= 79, 200 LPD	IGPD/LPD	- electronic link to permit - permit not dated
IA9E0125	Blue Circle Aggregates	Hamilton	Feb/00	N&P= GW - 1 well	N&P= 1 year	N&P= 1, 091, 040 LPD	IGPD/LPD	- electronic link to permit - permit not dated

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IA9E0140	United Aggregates Ltd.	Toronto	Feb/00	N&P= unclear	N&P= not stated	N&P= not provided	not provided	- electronic link to permit - permit not dated - this is an amendment to existing permit relating to changing the monitoring program and only information relating to monitoring was provided in the notice and permit
IA9E1384	Haliburton Outdoors Association	Kingston	Feb/00	N&P= GW - 2 wells	N= 10 years P= 1 year	N= no daily maximum only 540 LPH P= 583, 200LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Feb/00
IA9E1184	Blue Circle Aggregates	London	Feb/00	N&P= SW - 1 pit pond	N&P= 10 years	N= 2, 457, 000 LPD P= 2, 454, 840 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says permit issued Feb 8/00
IA9E1307	Crystal Lake Mobile Homes Court Ltd.	London	Feb/00	N&P= GW - 2 wells	N&P= 10 years	N&P= 234, 574 LPD combined quantity	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Dec. 31/99
IA9E1185	Blue Circle Aggregates	London	Feb/00	N&P= SW - 1 pit pond	N&P= 10 years	N= 247, 000 LPD P= 2, 454, 840 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Nov. 8/00
IA9E1310	Ingersoll Fasteners	London	Feb/00	N&P= GW - 1 well	N&P= 1 year	N&P= 863, 740 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Feb. 8/00

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IA9E1183	Blue Circle Aggregates	London	Feb/00	N&P= SW - 1 pit pond	N&P= 10 years	N= 2, 457, 000 LPD P= 2, 454, 840 LPD	LPD	- electronic lin in permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Feb. 8/00
IA9E1320	162665 Ontario Ltd. - Candlelight Village	London	Feb/00	N&P= GW - 1 well	N&P= 10 years	N&P= 56, 000 LPD	LPD	- electronic link in permit - expiry date noted under "Special Conditions" of permit - permit missing date but notice says it was issued Feb. 3/00
IA9E1186	Blue Circle Aggregates	London	Feb/00	N&P= GW - 1 pit pond	N&P= 10 years	N= 2, 457, 000 LPD P= 2, 454, 840 LPD	LPD	- electronic link in permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice states it was issued Feb. 8/00
IA9E1067	St Mary's Golf and Country Club	London	Feb/00	N&P= SW - Trout Creek and dugout pond	N= not stated P= 5 years	N= 9, 828, 000 LPD P= 9, 819, 360 LPD	LPD	-electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA9E1732	Paul Lisanti	London	Feb/00	N&P= SW - spring	N= "unknown" P= 2 years	N&P= 144, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says permit issued Jan. 21/00
IA9E1275	Wayne Channell	Kingston	Feb/00	N&P= SW - Lake Ontario	N= says proponent asked for 5 years but MOE granted 10 years P= 5 years	N= no daily maximum only 360 IGPM P= 259, 200 IGPD	IGPD/LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says permit issued Jan. 31/00

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IA9E1404	The Cadillac Fairview Corp. Ltd.	Kingston	Feb/00	N&P= SW - West Branch of Little Cataraqui Creek	N&P= 10 years	N&P= 19, 102, 500 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Jan/00
IA9E1129	The Landings Golf Course and Teaching Centre	Kingston	Feb/00	N&P= SW - Lake Ontario	N= 20 years P= 10 years	N&P= 1, 200, 000 IGPD	IGPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Feb/00
IA9E1300	1293426 Ontario Ltd.	London	Feb/00	N&P= SW - Saugeen River	N&P= 5 years	N= "1, 1455, 592" LPD P= 1, 145, 592 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice states that it was issued Dec. 31/99
IA9E1304	Washington Sand & Gravel	London	Feb/00	N&P= SW - gravel pit pond	N&P= 10 years	N&P= 4, 091, 400 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Jan. 20/00
IA9E1312	Wardsville Golf & Country Club	London	Feb/00	N&P= SW - Miller Lake (2 sources)	N&P= 5 years	N&P= 454, 600 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Feb. 15/00
IA00E0058	Royal Muskoka Golf & Country Club	London	Feb/00	N&P= SW - Lake Muskoka	N&P= 5 years	N&P= 1, 308, 500 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Feb. 15/00

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IA9E0124	Blue Circle Aggregates	Hamilton	Feb/00	N&P= G/SW - 1 well and Grand River	N&P= 4 years	N&P= well 9, 002 LPD and river 6, 609, 884 LPD	IGPD/LPD	- electronic link to permit - permit not dated
IA9E1398	Hay Bay Genetics Inc.	Kingston	Feb/00	N&P= G/SW - Bay of Quinte and 1 well	N&P= 5 years	N= no daily maximum only 1, 440 IGPM P= well - 1, 504 IGPD SW - 2, 160, 000 IGPD	IGPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Feb/00
IA9E1306	Oxbow Glen Golf Course	London	Feb/00	N&P= SW - Oxbow Creek and dugout pond	N&P= 5 years	N&P= 1, 062, 940 LPD combined quantity	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Feb. 3/00
IA00E0125	General Chemical Canada Ltd	London	Mar/00	N&P= "McGregor Quarry Sump"	N= 7 years P= 1 year	N&P= 16, 365, 600 LPD	LPD	- electronic link to permit - permit not dated
IA9E1057	Cobble Hills Golf and Ski Club	London	Mar/00	N&P= S/GW - 1 well and 1 dugout pond	N= not stated P= 5 years	N= well - 227, 500 LPD pond - 910, 00 LPD P= well - 131, 000 LPD pond - 909, 200 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA9E0349	Frank Beirnes	London	Mar/00	N&P= GW - 2 wells	N= not stated P= 1 year	N= 100, 000 IGPD P= 454, 600 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated
IA9E1333	Cericola Farms Ltd	London	Mar/00	N&P= GW - 2 wells	N&P= 10 years	N&P= 117, 832 LPD combined quantity	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated

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IA00E0171	Conestoga Heights Ltd.	Hamilton	Mar/00	N&P= GW - 3 wells	N&P= 10 years	N= 134, 107 LPD for each well P= 133, 920 LPD unclear if per well or combined	IGPD/LPD	- electronic link to permit is useful - permit not dated
IA9E1030	Walker Brothers Quarries Ltd.	Hamilton	Mar/00	N&P= SW - pond in a quarry	N&P= 10 years	N&P= 19, 547, 800 LPD	IGPD/LPD	- electronic link to the permit - permit not dated
IA8E1161	Whitechurch Water System	London	Mar/00	N&P= GW - 1 well	N= not stated P= 10 years	N= 8, 000 IGPD P= 227, 280 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says issued Mar. 14/00
IA8E1374	Parmalat Canada Mullbank Cheese	London	Mar/00	N&P= GW - 2 wells	N= not stated P= 10 years	N= 115, 200 IGPD combined quantity P= 523, 699 LPD combined quantity	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Mar. 17/00
IA7E0832	Waterlief Management Inc.	London	Mar/00	N= GW - 1 spring P= GW - 1 well	N= not stated P= 2 years	N= 590, 400 LPD P= 110, 880 LPD	LPD	- electronic link to permit is - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Mar. 22/00
IA9E1399	Ducks Unlimited Canada Kingston Div.	Kingston	Mar/00	N&P= SW - unnamed tributary to Wemps Bay & Lake Ontario and runoff and pump	N&P= 10 years	N= no daily maximum only 15, 250 IGPM not clear if combined quantity P= 300 Acre Feet storage capacity	Acre Feet	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Feb/00

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IA00E0085	Ducks Unlimited Canada Kingston Div.	Kingston	Mar/00	N&P= SW - unnamed tributaries to Loughborough Lake	N&P= 10 years	N= no daily maximum only 25, 200 IGPM P= 45 Acre Feet total capacity	Acre Feet	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA00E0087	Ducks Unlimited Canada Kingston Div.	Kingston	Mar/00	N&P= SW - unnamed tributary to Melville Creek	N&P= 10 years	N= no daily maximum only 9, 500 IGPM P= total capacity of 136 Acre Feet	Acre Feet	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA00E0088	Ducks Unlimited Canada Kingston Div	Kingston	Mar/00	N&P= SW - unnamed tributary to Consecon Lake	N&P= 10 years	N= no daily maximum only 22, 050 IGPM P= total capacity of 86 Acre Feet	Acre Feet	- electronic link to permit - expiry date noted under "Special Conditions" of PTTW - permit dated Mar. 1/00
IA9E1025	Don Green	Hamilton	Mar/00	N&P= SW - Boyne River	N&P= 5 years	N= 5, 450, 400 LPD P= 1, 800, 000 LPD	IGPD/LPD	- electronic link to permit - permit not dated
IA00E0080	Ducks Unlimited Canada Kingston Div.	Kingston	Mar/00	N&P= SW - unnamed tributary to Pleasant Bay	N&P= 10 years	N= no daily maximum only 13,500 IGPM P= 90 Acre Feet total capacity	Acre Feet	- electronic link to permit - expiry date noted under "Special Conditions" of PTTW - permit dated in Mar/00
IA00E0259	Moira River Conservation Authority	Kingston	Mar/00	N&P= SW - Moira River	N&P= 10 years	N&P= 8, 000, 000 LPD	LPD	- electronic link to the actual permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA00E0260	Moira River Conservation Authority	Kingston	Mar/00	N&P= SW - Moira River	N&P= 10 years	N&P= 6, 000, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00

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IA00E0261	Moira River Conservation Authority	Kingston	Mar/00	N&P= SW - Moira River	N&P= 10 years	N&P= 11, 000, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA00E0262	Moira River Conservation Authority	Kingston	Mar/00	N&P= SW - Moira River	N&P= 10 years	N&P= 10, 000, 000 LPD	LPD	- electronic link to the actual permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA00E0263	Moira River Conservation Authority	Kingston	Mar/00	N&P= SW - Moira River	N&P= 10 years	N&P= 7, 500, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA00E0083	Eldon McCready	Kingston	Mar/00	N&P= SW - St. Lawrence River	N&P= 10 years	N= no daily maximum only 600 IGPM P= 72, 000 IGPD	IGPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA00E0094	Caledon County Club	Toronto	Mar/00	N&P= SW - Credit River	N&P= 10 years	N= 2, 587, 400 LPD P= 2, 587, 800 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA9E1068	E.C. King Contracting	London	Mar/00	N&P= SW - Quarry Pond	N= not stated P= 10 years	N= 29, 484, 000 LPD P= 6, 480, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated

Registry Number	Name of Company	MOE Issuing Office[1]	Notice Month/ Year	Water Source N= notice P= permit SW= surface water GW= ground water	Length of Permit[2] N= notice P= permit	Maximum Daily Quantity of Water Taking (or maximum capacity)[3] N= notice P= permit	Format of Max. Daily Quantity in PTTW[4]	Comments on Notice or Permit (link from notice to permit; details re: expiry date, permit date, quantity etc.)
IA9E1303	Brian Smith c/o 717350 Ontario Ltd.	London	Mar/00	N= unclear - description part of notice states 5 ponds and a tile drain but decision part of notice states "wells" P= 5 ponds and 1 tile drain	N= 1 year P= 5 years	N= description portion of notice states 17, 085, 686 LPD proposed taking from all sources (ponds and tile drains) but decision portion of notice states 454, 600 LPD per day from "wells" P= 17, 085, 686 LPD from all sources (ponds and tile drains)	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Feb. 11/00 - confusing notice
IA9E1673	Cavanagh Construction Ltd.	Kingston	Mar/00	N&P= SW - 1 pond	N&P= 10 years	N= no daily maximum only 2, 700 IGPM P= 1, 620, 000 IGPD	IGPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00
IA9E0118	Kimberly-Clark Inc. Huntsville Mill	London	Mar/00	N&P= SW - Big East River	N= not stated P= 10 years	N&P= 9, 467, 000 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Mar. 14/00
IA00E0382	Kingsville Golf & Country Club	London	Mar/00	N= SW - Wigle Creek N= SW - on stream pond	N&P= 5 years	N&P= 477, 330 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says it was issued Mar. 14/00
IA9E1299	Muskoka Lake Golf & Country Club	London	Mar/00	N&P= SW - Lake Rosseau	N= "indefinite" P= 5 years	N&P= 1, 226, 470 LPD	LPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit not dated but notice says issued Mar. 16/00

Registry Number	Name of Company	MOE Issuing Office[1]	Notice Month/ Year	Water Source N= notice P= permit SW= surface water GW= ground water	Length of Permit[2] N= notice P= permit	Maximum Daily Quantity of Water Taking (or maximum capacity)[3] N= notice P= permit	Format of Max. Daily Quantity in PTTW[4]	Comments on Notice or Permit (link from notice to permit; details re: expiry date, permit date, quantity etc.)
IA9E8504	Cruickshank Construction Ltd.	Kingston	Mar/00	N&P= SW - pond - pit or quarry	N&P= 10 years	N= no daily maximum only 1, 000 IGPM P= 304, 000 IGPD	IGPD	- electronic link to permit - expiry date noted under "Special Conditions" of permit - permit dated in Mar/00

Endnotes

1. We tracked the MOE issuing office out of interest since there appears to be an issue with varying levels of detail/quality in notices and permits.

2. Permit lengths are approximate to the nearest year either based on permit expiry date or, when that wasn't available, information from the decision notice.

3. a.) LPM= litres per minute; LPH= litres per hour; LPD= litres per day; LPW= litres per week
IGPM= imperial gallons per minute; IGPD= imperial gallons per day; IGPW= imperial gallons per week
U.S.GPM= United States gallons per minute; U.S.GPD= United States gallons per day; U.S.GPW= United States gallons per week
m^3= metres cubed

   b.) Some notices only provide a rate "per minute". This is not a helpful measurement, especially if other details such as length of permit, number of days of water taking etc. are not provided. A daily rate provides a better sense of quantity.

4. We are interested in the format used to record the water taking quantity in the permit. If quantities are not provided in a standard format (between permits and between the permits and Registry notices), it will be more difficult for the public, stakeholders and the Ministry to easily quantify the amount of water being taken in any given area of the province. It may also detract from the ministry's ability to "see the big picture" when granting permit renewals or new permits.

5. The presentation of information (permit date, expiry date, water taking sources and quantities) varies among the permits. Out of interest, we picked one variable (permit expiry date) and one style (expiry dates appearing in the "Special Conditions" of the permit) and kept track of it . By way of contrast, alternatively a permit's expiry date sometimes appears on the front page of a permit.

APPENDIX F: Data Listing for the Follow-up Assessment of PTTW Decision Notices with Deficiencies
April 1, 2000 to November 30, 2000 Sample size = 42

Registry Number	Source of Water	Amount of Taking	Purpose	Period of Taking	Date Permit Issued	Expiry Date	Comments Summary	Length of Permit	Link	Leave to Appeal	Contact Name	Office	Time to Post
IA6E1042	ground	permit not granted	commercial	365 days	permit not granted	permit not granted	permit not granted	permit not granted	permit not granted	permit not granted	no	unknown	4 years
IA7E1705	ground - both Registry notice and permit state source as 3 wells	3 wells - Registry posting states 90 IGPM (129,600 IGPD), 275 IGPM (396,000 IGPD), 115 IGPM (165,600 IGPD) but permit states 1,643,000 LPD (360,000 IGPD) combined	industrial - both Registry notice and permit state same purpose	can't determine in either Registry notice or permit	can't determine in either Registry notice or permit	can't determine in Registry notice but permit states 31-Mar-10	1 comment - poor summary	can't determine in Registry notice but according to expiry date in permit, length is 10 years	yes	yes	no	Hamilton	3 years
IA8E0455	unknown - Registry posting states gravel pit pond and permit states 3 dugout ponds	Registry posting states 85 LPM (61,200 LPD) and permit states the same	aggragate washing	can't determine in either Registry notice or permit	can't determine in Registry posting or permit	31-Mar-10 - expiry date same in both Registry notice and permit	no comments	10 years	yes	yes	no	Hamilton	2 years
IA8E1005	surface	7,178 LPM (11,100,000 LPD)	artificial marsh	365 days	14-Apr-00	can't determine	no comments	can't determine	not work	yes	no	London	2 years
IA8E1099	surface	750 IGPM for 7 hours at night	irrigation of golf course	Apr-Dec 1999	01-Apr-99	31-Dec-99	no comments	9 months	no	no	no	unknown	2 years
IA9E0066	can't determine if just ground or ground and surface in both Registry posting and permit	46 LPM, 114 LPM and 682 LPM - same in both Registry posting and permit	can't determine in posting but permit states irrigation and clubhouse use	can't determine in either Registry posting or permit	can't determine in either Registry notice or permit	31-Mar-10 - same in Registry posting and permit	no comments	10 years	yes	yes	no	Hamilton	1.5 years
IA9E1699	ground	295 IGPM (424,800 IGPD)	aquaculture	365 days	can't determine	31-Mar-00	no comments	10 years	no	yes	no	Hamilton	1 year

Registry Number	Source of Water	Amount of Taking	Purpose	Period of Taking	Date Permit Issued	Expiry Date	Comments Summary	Length of Permit	Link	Leave to Appeal	Contact Name	Office	Time to Post
1A00E0209	ground	Both Registry posting and permit state 680 LPM combined from wells, Registry notice also states 150 LPM from deep acquifer for clubhouse	Both Registry notice and permit state irrigation of golf course	Registry notice states 140 days but nothing in permit	can't determine in Registry posting, permit dated 19-Jul-00	Both Registry notice and permit state 31-Dec-00	no comments	can't determine	yes	no	no	unknown	months
1A00E0251	surface	400 IGPM	commercial	can't determine	09-Jun-00	can't determine	no comments	10 years	not work	yes	no	Kingston	months
1A00E0356	surface	706 LPM	waterfowl	20 days	05-Apr-00	can't determine	no comments	10 years	not work	yes	no	London	days
1A00E0362	surface	494 LPM	waterfowl	20 days	06-Apr-00	can't determine	no comments	can't determine	not work	yes	no	London	days
1A00E0368	surface	318 LPM	waterfowl	15 days	06-Apr-00	can't determine	no comments	10 years	not work	yes	no	London	days
1A00E0388	surface	7200 IGPM	waterfowl	summer 2000	can't determine	can't determine	no comments	10 years	not work	yes	no	Kingston	days
1A00E0443	can't determine	7200 LPM	industrial	May-Dec	01-Jun-00	can't determine	no comments	10 years	not work	yes	no	Kingston	days
1A00E0462	effluent from Sewage treatment plant	750 IGPM	irrigation of golf course	180 days	01-Aug-00	15-Aug-05	no comments	5 years	not work	yes	no	London	days
1A00E0464	can't determine	1000 IGPM	irrigation of golf course	120 days	13-Apr-00	can't determine	no comments	5 years	not work	yes	no	London	days
1A00E0615	surface	600 IGPM from by-pass pond, 540 IGPM from creek	irrigation of golf course	Apr-Oct	19-May-00	can't determine	no comments	10 years	not work	yes	no	Kingston	days
1A00E0712	surface	1137 LPM from creek, 1,818,400 LPD from storage pond	irrigation of golf course	May-Oct	can't determine	can't determine	no comments	10 years	not work	yes	no	Toronto	months to days
1A00E0713	surface	4500 LPM	irrigation of golf course	May-Oct	can't determine	permanent	no comments	permanent	not work	yes	no	Toronto	months to days
1A00E0731	can't determine	200 IGPM	irrigaton for frost protection	May-Sept	can't determine	31-Mar-10	no comments	10 years	not work	yes	no	Thunder Bay	months to days

Registry Number	Source of Water	Amount of Taking	Purpose	Period of Taking	Date Permit Issued	Expiry Date	Comments Summary	Length of Permit	Link	Leave to Appeal	Contact Name	Office	Time to Pe
1A00E0771	surface	1300 LPM from Lake Huron, 4000 LPM from dammed reservoir	irrigation of golf course	130 days and 80 days	25-Jul-00	31-Jul-10	no comments	10 years	not work	yes	no	Toronto	days
1A00E0790	surface	600 IGPM	irrigation of golf course	May-Oct	can't determine	31-Mar-05	no comments	5 years	not work	yes	no	Thunder Bay	months to days
1A00E0794	surface	1,640,000 LPD from creek, 682,000 LPD from irrigation pond, 682,000 LPD from storage pond, 682,000 LPD from future storage pond	irrigation of golf course	Apr-Oct	can't determine	can't determine	no comments	10 years	not work	yes	no	Toronto	months to days
1A00E0829	ground	Both permit and Registry notice states 900 LPM from irrigation well, 225 LPM from clubhouse well	irrigation of golf course	can't determine in Registry posting or permit	can't determine in Registry posting, permit states 10-Jul-00	can't determine in Registry posting but permit states 31-Dec-00	no comments	can't determine in Registry notice but according to expiry date in permit, length is 5.5 months	yes	no	no	unknown	months to days
1A00E0830	ground	Registry notice and permit state 360 LPM from well TW3, 360 LPM from well TW4	irrigation of golf course	Both permit and registry notice state150 days	can't determine in Registry posting, permit is dated10-Jul-00	can't determine in Registry posting but permit states 31-Dec-00	no comments	can't determine in Registry notice but according to expiry date in permit, length is 5.5 months	yes	no	no	unknown	months to days
1A00E0846	ground	Registry notice and permit state 400 LPM and 1200 LPM from irrigation wells,and 2750 LPM from pond, Registry notice states 42 LPM from house well but not in permit	irrigation of golf course	Both Registry notice and permit state May-Oct	can't determine in Registry posting, permit dates 11-Jul-00	can't determine in Registry notice but permit states 31-Dec-00	no comments	can't determine in Registry notice but according to expiry date in permit, length is 5.5 months	yes	no	no	unknown	months to days

Registry Number	Source of Water	Amount of Taking	Purpose	Period of Taking	Date Permit Issued	Expiry Date	Comments Summary	Length of Permit	Link	Leave to Appeal	Contact Name	Office	Time to Post
1A00E0898	surface	25 IGPM from first location and 2000 IGPM from second	irrigation of golf course	June-Aug	can't determine	can't determine	no comments	5 years	not work	yes	no	Toronto	months to days
1A00E0906	ground	455 LPM	irrigation of golf course	184 days	06-Sep-00	can't determine	2 comments - poor summary	can't determine	not work	yes	no	London	days
1A00E0916	can't determine	1181 LPM	can't determine	20 days	16-Oct-00	can't determine	no comments	5 years	not work	yes	no	London	days
1A00E0943	ground	not issued - previous permit still vaild until 31-Mar-09	irrigation and drinking	365 days	not issued - previous permit vaild until 31-Mar-09	31-Mar-09	no comments	9 years	no	no - permit not issued	no	unknown	days
1A00E0954	surface	1703 LPM	irrigation of golf course	170 days	01-Aug-00	31-Jul-05	no comments	5 years	not work	yes	no	London	days
1A0E0970	ground	45 LPM	groundwatereme diation	can't determine	can't determine	can't determine	no comments	can't determine	not work	yes	no	Thunder Bay	months to days
1A00E1229	surface	200 IGPM	municipal, holding tanks, pools, farmers' needs	365	11-Oct-00	can't determine	no comments	10 years	not work	yes	no	Kingston	days
1A00E1322	ground - Registry posting and permit both state well as source	60 IGPM, 86,400 IGPD - Registry posting and permit have state same quantity	food processing - both Registry posting and permit state same purpose	365 days - permit does not specify period of taking	can't determine in Registry posting or permit	31-Mar-10 - both Registry posting and permit state same expiry date	10 comments - poor summary	10 years	yes	yes	no	Hamilton	days to months
1A00E1355	surface	58,330 litres per second	hydro	365 days	can't determine	31-Mar-05	no comments	5 years	not work	yes	no	Thunder Bay	days
1A00E1389	surface	120 U S gallons per minute	can't determine	can't determine	can't determine	31-Mar-05	no comments	5 years	not work	yes	no	Hamilton	days
1A00E1402	can't determine	800 LPM	aggregate washing	200 days	13-Oct-00	can't determine	no comments	10 years	not work	yes	no	London	days
1A00E1417	ground	230,400 IGPM per well (5 wells)	free product (diesel) recovery system	365 days	06-Nov-00	31-Dec-05	no comments	5 years	not work	yes	no	Thunder Bay	days
1A00E1464	ground	45 LPM for well 1, 91 LPD for well 2 and 45 LPM for spring	campground	365 days	30-Oct-00	can't determine	no comments	5 years	not work	yes	no	London	days

Registry Number	Source of Water	Amount of Taking	Purpose	Period of Taking	Date Permit Issued	Expiry Date	Comments Summary	Length of Permit	Link	Leave to Appeal	Contact Name	Office	Time to Post
1A00E1465	can't determine	1427 LPM for each pond and reservoir	irrigation of golf course	102 days	23-Oct-00	can't determine	no comments	5 years	not work	yes	no	London	days
1A00E1555	ground	120,000 LPD	water supply for mineral exploration camp	can't determine	06-Nov-00	31-Dec-03	no comments	3 years	not work	yes	no	Thunder Bay	days
1A00E1556	ground	150,000 LPD	mineral processing	can't determine	06-Nov-00	31-Dec-03	no comments	3 years	not work	yes	no	Thunder Bay	days

IGPM = imperial gallons per minute IGPD = imperial gallons per day LPM = litres per mintue LPD = litres per day

APPENDIX G: Data Listing from ECO's Select Review of Special Conditions in PTTWs

Analysis of Measuring and Reporting Conditions Contained Within Permits to Take Water for Notices Posted on the Environmental Registry in June 1999

Registry Number	Name of Company	MOE Issuing Office	Notice (N) & Permit (P) Month/ Year	Water Source listed in PTTW	Length of Permit	Daily Quantity of Water Taking Stated in PTTW	Average &/or Seasonal Water Taking Amounts Specified in PTTW	Specific Conditions in PTTW Requiring the Measuring/ Reporting of Water Taking	Specific Condition in PTTW Stating Director's Power to Alter Water Taking
IARE1047	Niagara Falls Golf Club	Hamilton	N= Jun/99 P= Apr/99	G/SW - 2 wells and 1 dugout pond	Not Stated	wells 916,162 LPD combined pond 436,000 LPD	No	No - but there is a requirement for quarterly monitoring of all wells within 500 m of the taking for 2 years	No
IA9E0560	Santa Maria Trailer Resort Ltd.	Thunder Bay	N= Jun/99 P= Jun/99	GW - 2 wells - one existing and one proposed	9 Years	32,610 IGPD combined	No	No - and general conditions were missing from copy of the permit	Yes - as a "special" condition[1]
IA9E0299	United Canadian Malt Ltd.	Kingston	N= Jun/99 P= Jun/99	GW - 4 wells	10 years	150,000 LPD combined	No	Yes - daily measuring and recording required for each well	Yes - as a "general" condition
IA9R0104	Inco Ltd. Ontario Div, Gen. Eng. Building, Copper Cliff	Thunder Bay	N= Jun/99 P= Mar/99	SW - Onaping River	10 Years	2,416,000 IGPD	No	No	No

Registry Number	Name of Company	MOE Issuing Office	Notice (N) & Permit (P) Month/ Year	Water Source listed in PTTW	Length of Permit	Daily Quantity of Water Taking Stated in PTTW	Average &/or Seasonal Water Taking Amounts Specified in PTTW	Specific Conditions in PTTW Requiring the Measuring/ Reporting of Water Taking	Specific Condition in PTTW Stating Director's Power to Alter Water Taking
IA9E0036	North Granite Ridge Golf Centre	London	N= Jun/99 P= Not Stated	GW - 2 wells	Not Stated	477,360 LPD combined	No	Yes - daily recording of flows and pumping rates from the PTTW wells; during irrigation season weekly recording of static water levels in nearby wells, including a newly established observation well; submission of all data annually to MOE	Yes - as a "special" condition
IA9E0411	Longmuir & Co. Builders Ltd.	Kingston	N= Jun/99 P=Jun/99	GW - 2 wells	10 Years	170,000 LPD combined	No	Yes - daily measuring and recording required	Yes - as a "general" condition
IA9E0523	Zenon Environmental Inc.	Toronto	N= Jun/99 P=Jun/99	GW - 1 well	10 Years	12,540 IGPD	Yes - average number of hours of taking a day	No	Yes - as a "general" condition
IA9E0043	E.D. Smith and Sons Ltd.	Hamilton	N= Jun/99 P= May/99	SW - Lake Ontario	Not Stated	5,891,616 LPD	No	No	No

Registry Number	Name of Company	MOE Issuing Office	Notice (N) & Permit (P) Month/ Year	Water Source listed in PTTW	Length of Permit	Daily Quantity of Water Taking Stated in PTTW	Average &/or Seasonal Water Taking Amounts Specified in PTTW	Specific Conditions in PTTW Requiring the Measuring/ Reporting of Water Taking	Specific Condition in PTTW Stating Director's Power to Alter Water Taking
IA9E0074	Lynbrook Family Golf Centre Inc.	Hamilton	N= Jun/99 P=Apr/99	G/SW - 1 well and 3 ponds	10 Years	7,200 LPD well 40,860 LPD ponds	No	Yes - quarterly recording of: static groundwater levels of all on site wells and the water level of the irrigation pond; monthly recording of potable well water use; annual submission of results to MOE	No
IA9E0038	Victor Ruffolo Ltd.	Hamilton	N= Jun/99 P=May/99	GW - 3 wells	Not Stated	90,920 LPD combined	No	Yes - daily recording of water quantities taken from the three wells and discharged to the distribution system	No
IA9E0045	Courtlea Mobile Park	Hamilton	N= Jun/99 P= Apr/99	GW - 5 wells	Not Stated	154,564 LPD combined	No	No	No
IA9E0037	Country Meat Packers	Hamilton	N= Jun/99 P=Apr/99	GW - 1 well	Not Stated	195,478 LPD	No	No	No
IA9E0044	Adam Young	Hamilton	N= Jun/99 P=Apr/99	GW - 2 wells	10 Years	392,774 LPD combined	No	No	No
IA9E0100	Garry Charles McDonald	Hamilton	N= Jun/99 P= May/99	GW - 1 flowing drilled well	Not Stated	63,644 LPD	No	No	No

1. Note that PTTWs contain both "general" and "special" conditions. General conditions are generic and applied to most permits. Special conditions are particular to the specific water taking. In the case of the Director's power to alter the water taking, MOE sometimes places this as a "general" condition and sometimes as a "special" condition. ECO is not aware of the reason for the variance in practice.